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Addicts Speak: An Exploratory Ethnographic Study of Opioid Addiction

by

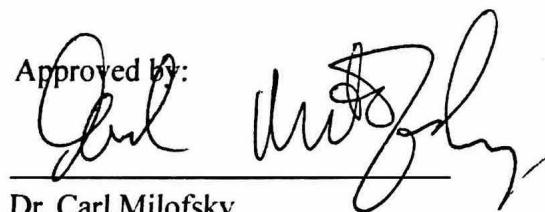
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A Proposal Submitted to the Honors Council

For Honors in Department of Sociology

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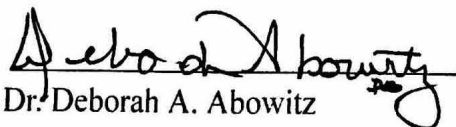
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Table of Contents

Chapter 1: Introduction.....	4
Chapter 2: Literature Review.....	7
Chapter 3: Methods & Data.....	19
Chapter 4: No One Recovers Alone.....	30
Chapter 5: If You're Sick, You Need Medicine.....	61
Chapter 6: The Clinic.....	81
Chapter 7: Conclusion.....	97
Bibliography.....	101
Appendix 1.....	112
Appendix 2.....	116

Abstract

This thesis explores the experiences of people in recovery from opioid addiction in order to better understand the many process of recovery. Employing both participant observation and focused life history interview, and utilizing a grounded theory approach to data analysis, this research emphasizes data-driven conclusions. The research provides numerous insights into the process of recovery from opioid addiction, as well as factors that help to facilitate and sustain the process, the role that services play, and how services can be developed to better meet the needs of those in recovery.

Chapter 1: Introduction

The United States is in the midst of an ongoing and rapidly changing public health emergency, the Opioid Crisis. In 2014, there were nearly 30,000 deaths related to prescription painkillers and heroin, representing a four-fold increase since 1999 (Quinones 2015). Over the past two years, thousands of media articles have been written about it, numerous television and radio news sources have run profiles on individuals suffering from opioid addiction, nearly all states and counties have held public hearings, Congress passed new laws, and President Trump has now pledged funding and action to address this growing crisis. The year 2015 was marked by an estimated 2.1 million people in the United States suffering from addiction to prescription opioid pain relievers and an estimated 591,000 addicted to heroin (NIDA 2016). In spite of the rising death toll and alarming number of people addicted to opioids (e.g., heroin or prescription opioid pain relievers), there are a subgroup of individuals that do managed to recover from their addiction to opioid drugs. Although there is no single definition, recovery can be thought of as the process through which problem drug use and addiction are resolved in tandem with the development of physical, social, emotional, and occupational health (White & Kurtz 2006). White (2014) indicates there are a variety of routes leading to recovery initiation. Moreover, the social context in which addicted persons are successful in terminating their drug use and initiating their recovery also varies widely (White 2014). Unlike the elaborate systems of measurement used to record the subtlest of changes in the prevalence of opioid use, there is no such system for measuring the incidence and prevalence of recovery from opioid addiction (White 2014). Nevertheless, a few researchers have reported relatively high rates of recovery, some even as high as 72% (White & Kurtz 2006). Those studies and others like them, examining rates of recovery do not have an agreed upon operationalization, let alone a standard evaluative

measure for assessing recovery (White 2014). Therefore, despite the burgeoning interest in the concept of recovery as demonstrated in the research literature (White 2014), there is still little known about the process of recovery, especially following opioid addiction.

In this thesis study, I explore the lived experiences of individuals in recovering from opioid addiction. Originally, I set out to investigate the affective, bodily, and structural dynamics of vulnerability and sociality within a rural community that in turn shape demographic outcomes related to opioid addiction such as recovery, relapse, and overdose. However, as the research took form, my work shifted towards exploring the various community-level, family, social contextual, medical, behavioral, and emotional mechanisms; and the interaction of these mechanisms which stimulated the initiation and maintenance of recovery among my participants. My qualitative research, utilizing the grounded theory approach (Glaser & Strauss 1967), was data driven and emphasized the value of emergent themes and conceptual categories (Charmaz 2014). For this reason, the data and conclusions presented in the chapters to follow draw heavily upon the life histories and recovery narratives of the study participants.

Chapter 2 will provide a brief definition of recovery that will serve as a guide throughout the thesis. In this chapter I also give an overview of the literature on two dominant, yet seemingly antithetical theoretical models of addiction, as well as the implications of these models for addiction treatment and recovery.

Chapter 3 describes the qualitative methods used during data collection, discussing the study participants and research setting, provides an explanation of the ground theory approach, and explains how the data were analyzed.

Chapter 4 delves into the stories and lives of those in recovery, focusing on four case examples. This chapter also considers emergent themes regarding community, family, social

network, and personal factors that were indicated by the majority of study participants as important for initiating their recovery.

Chapter 5 focuses on a particular participant, and explores the important role that neurobiological research on addiction as well as the medical treatments associated with such research played in the lives of my participants as they navigated the challenging landscape of addiction and ultimately recovery.

Chapter 6 offers a critique of the prevailing acute care approach to treatment of opioid addiction, and contrasts that approach with the “small town” approach employed at the Addiction Help Center, a residential clinic and the main setting for my research. Again, drawing from the lived experiences of the study participants, this chapter describes the effectiveness and need for a recovery-oriented continued care program, much like the one offered at the Addiction Help Center.

Lastly, Chapter 7 discusses the study’s contribution to the literature on addiction as well as the recovery literature. This chapter concludes with a considerations of future directions for recovery research.

Chapter 2: Literature Review

This chapter provides a basic literature review on the concept of recovery, current theoretical models of addiction and the implications of such models for treatment as well as recovery. The theoretical perspectives presented typically fall under two main categories: the biomedical and more recently, the sociological or social constructionist models. The chapter will close out with a presentation of the existing gaps in the literature, which have contributed to the development and implementation of this study. The aims of this research are also presented.

What is Recovery?

While there has not been an agreed upon definition of “recovery,” the term has been previously described as a complex and dynamic process, with considerable variation across individuals (Hser & Anglin 2011). White (2014) defines recovery as “the experience through which addicted persons use internal and external resources to voluntarily solve their problems associated with drug addiction” (329). Furthermore, recovery involves actively managing prolonged vulnerability to re-addiction in order to develop a healthy, productive and meaningful life (White 2014). This broad definition of recovery can be understood as both a process and a sustained status that is inextricably tied to the individual in recovery. It incorporates psychological, physiological, behavioral, and social components of recovery as well as societal, environmental, and interpersonal aspects (White 2014). The final part of the definition emphasizes that recovery is not simply eliminating the behavior, feelings, and thoughts associated with addiction, but also involves learning new ways of acting, emoting, and thinking that promote meaning, growth and purpose in the recovering person’s life (White 2014).

Biomedical Model

The Disease Concept of Addiction

Over the past two decades studies of addiction and recovery have been dominated by the biomedical perspective that drug addiction is a “chronically relapsing brain disease” or CRBD (Leshner 1997; Volkow et al. 2016). The prevailing CRBD conceptualization of addiction is the result of dramatic and rapid progress in the field of neurobiology that has implicated the recurrent use of opioids (e.g., heroin) and other drugs of abuse with alterations in the neurocircuitry of the mesolimbic dopamine pathway (Leshner 1997; Volkow & Li 2004; Koob & Volkow 2010). This dopaminergic pathway is responsible for the assessment of rewarding stimuli and the facilitation of reinforcement, as well as the release of the “feel good” neurotransmitter dopamine (Leshner 1997; Volkow et al. 2004; Kalivas & Volkow 2005; Koob 2008; Koob & Volkow 2010; Volkow et al. 2016). In addition to this neural pathway, the anterior cingulate cortex, basal forebrain, hippocampus, orbitofrontal cortex, and the amygdala also play a role in the addiction (Volkow & Li 2004; Kalivas & Volkow 2005; Fowler et al. 2007; Koob & Volkow 2010; Volkow et al. 2016). Most of the recent studies in both humans and in laboratory animals, have shown that addiction is made up of three recurring stages, each stage is associated with the activation of specific neurobiologic circuits and the consequential clinical and behavioral characteristics (Goldstein & Volkow 2002; Volkow & Li 2004; Koob & Volkow 2010; Volkow et al. 2016).

The first stage involving bingeing and intoxication, is associated with a sharp increase of activity in the mesolimbic dopamine pathway that is caused by the consumption of a drug of abuse (e.g., opioids) (Volkow et al. 2004; Kalivas & Volkow 2005; Volkow et al. 2007; Koob 2008; Koob & Volkow 2010; NIDA 2016; Volkow et al. 2016). Specifically, the opioid drugs

activate the dopamine receptors in the brain, and in turn elicits a rewarding signal that triggers conditioning (Koob & Le Moal 2001; Le Moal & Koob 2007; Koob 2008; Koob & Volkow 2010; Volkow et al., 2016). This type of conditioning causes the brain to increase the response (i.e., release more dopamine) with continued administration of the drug (Volkow et al., 2016). Consequently, drug use repeatedly paired with increasing surges of dopamine, in turn triggers craving for the drug, motivation for drug-seeking behaviors, and ultimately leads to heavy use of the drug (Koob & Le Moal 2001; Weiss 2005; Koob 2008; Volkow et al. 2016). These conditioned responses become deeply ingrained and can trigger strong cravings for a drug long after use has stopped (e.g., due to incarceration or treatment) and even in the face of sanctions against its use. Ultimately, the recurrent administration of drugs leads to a persistent and abnormal volume of dopamine within the brain, creating an unusually rewarding experience throughout this initial stage of the addiction cycle (Volkow & Li 2004; Koob & Volkow 2010; Volkow et al. 2016).

Symptoms of withdrawal and negative affect characterize the second phase of addiction. Previous literature indicates that the second stage of drug addiction occurs when dysregulation in the mesolimbic dopamine pathway causes the amount of dopamine to drop dramatically (Koob & Le Moal 2001; Volkow et al. 2007; Koob 2008). With the decrease in dopamine, once typically rewarding stimuli begin to lose their positive impact on the individual's brain, and thus the motivation to obtain these normal rewards is significantly diminished (Koob 2008; Volkow & Morales 2015). Furthermore, Wise (2008) states that in the brains of individuals suffering from opioid addiction, the decreased production of dopamine, leading to severe states of depression and physical displeasure. These states encompassing negative affect and physical symptoms are known as the withdrawal experience, which is typically induces relapse, or return

to consumption of the drug, as a mechanism for relieving the symptoms associated with discontinued use (Koob & Le Moal 2005; Koob & Volkow 2010). According to Volkow and colleagues in 2016, the chronic use of dopamine enhancing drugs (e.g., opioids) not only leads to the direct and conditioned pull toward the “rewards” of drug use, but also an intense motivational push to escape the discomfort associated with the after effects of use.

Preoccupation and anticipation constitute the third and final stage. This stage is characterized by the chronic relapse associated with addiction (Koob & Volkow 2010). In this stage, the alterations in the reward and emotional neural pathways are followed by changes in the functionality of the prefrontal cortex (Goldstein & Volkow 2011). The prefrontal cortex is primarily responsible for executive functioning, decision making, and self-control (Goldstein & Volkow 2011). Neuroimaging studies have suggested that relapse during this stage occurs either from the presence of stimuli paired with drug use, or drug-seeking behaviors are activated by stressful events (e.g. withdrawal), as previously mentioned (Goldstein & Volkow 2002; Volkow et al. 2004; Langleben et al. 2009; Koob & Volkow 2012; Volkow et al. 2016). According to Koob and Volkow (2010), in addition to the reduced sensitivity to dopamine, there is also a heightened reactivity to stress and a reduced signaling of glutamate in prefrontal regions of the brain. The disruption in signaling of both the dopaminergic and glutamatergic pathways to the prefrontal regulatory circuits as well as the changes in the reward and stress-regulatory circuitry, leads to a neurochemical dysregulation that is crucial to both the onset of drug cravings and drug-taking behavior in the addicted disease state, despite the potentially catastrophic consequences (Koob & Le Moal 2001; Koob 2008; Volkow & Morales 2015). Volkow and colleagues (2016) note that it is important to recognize that those suffering from addiction often

continue to take the drug to escape the physical and emotional symptoms of withdrawal that they feel when they are not intoxicated.

Medicalized Approach to Treatment

The aforementioned biomedical model of addiction asserts that due to long-lasting adaptations in the brain resulting from chronic drug exposure, drug addiction must be viewed as a chronic disease (Volkow & Li 2004; Volkow et al. 2007; Koob 2008; Saitz et al. 2008; Koob & Volkow 2010; Volkow et al. 2016). Similar to other chronic diseases, drug addiction requires long-term treatment in most cases (Saitz et al. 2008; Volkow et al. 2014; Volkow et al. 2016; Volkow & Collins 2017). Accordingly, research based on this biomedical model of addiction has shown that medical treatments, specifically pharmacological therapy can help to restore healthy function in the altered neurocircuitry and improve behavioral outcomes. There are a number of evidence-based pharmacological interventions that are known to improve clinical outcomes in individuals suffering from addiction (Volkow et al. 2014; Bell 2014; Volkow et al. 2016). During treatment, addicts are typically given medically-assisted treatment (MAT) drugs that can assist in preventing relapse, reducing harmful behaviors, and allowing the addicted person to regain normal emotional and cognitive functionality (Volkow et al. 2014; Volkow et al. 2016). In particular, for patients with opioid addiction, maintenance therapy with agonists (e.g., methadone), partial agonists (e.g., Suboxone), or antagonists (e.g., Vivitrol) medications can be essential in helping to control symptoms of withdrawal and cravings (Bell 2014). Clinical studies have established that the use of methadone and buprenorphine medications for the treatment of opioid addiction was associated with decreases in the number of overdoses and a reduction the rate of drug-related criminal activity (Schwartz et al. 2013; Bell 2014; Volkow 2014). Volkow and colleagues (2014) did posit, however, that due to the involvement of multiple brain pathways

(reward, motivation, learning, inhibitory control and executive function) and their associated disruption in behaviour, the chronic maintenance approach to medical treatment should also incorporate psychological therapy and other social support services. The above-stated comprehensive treatment strategy would likely increase retention of patients in treatment and more effectively maintain abstinence from opioid abuse (Volkow et al. 2014; Volkow et al. 2016). Despite these recommendations, many physicians and other addiction treatment professionals have not yet integrated this multi-modal model approach to treating addiction (Dugosh et al. 2016).

Implications for Recovery

The biomedicalized CRBD model (Leshner 1997) of addiction is conceptualized in much the same way as other chronic conditions such as diabetes or cancer, in which the disease is characterized by periods of remission and relapse (McLellan et al. 2000; Laudet 2007). Accordingly, recovery from addiction involves multiple attempts and episodes of medical treatment, ultimately meaning that addiction cannot be cured but managed over the course of the person's life (Dennis & Scott 2007). Such medical treatments assist those in recovery by reducing harm, and improving brain overall health in the short term (Volkow et al. 2014). Additionally, medical treatments can help those who complete treatment to achieve sustained recovery in the longer term (Dennis & Scott 2007; White & McLellan 2008; Volkow et al. 2014). Despite the potential utility of medical treatment for supporting long-term recovery, the use of such medications should be incorporated as one aspect of a comprehensive approach to recovery that considers the combined influence of medical, historical, social, and cultural factors on an individual's experience of addiction and recovery.

Social Constructionist Model

Sociological Perspectives on Addiction

In contrast to neurobiological studies of addiction and recovery which focus on the neuroanatomical changes; sociological research emphasizes the social meaning as well as social contextual variables that influence the relationship between addiction and the addicted person (Lindesmith 1947; Becker 1953, 1967; Denzin 1993). Consequently, this theoretical perspective highlights the collective whole of the social system or the social environment's influence on the addicted individual, with the belief that in order to understand the addicted individual, the social environment must be fully uncovered and disclosed (Weinberg 2011).

The basic idea behind the sociological approach is that the social environment stimulates human senses through direct experiences, observational learning, and conditioning mechanisms, all of which are theoretically associated with addiction (Drummond, 2001; Weinberg 2011). Correspondingly, evidence suggests that specific stimuli in the social and cultural environment influences the development of addiction (Weinberg 2012; Granfield & Reinarman 2014). The development of sociological theories of addiction, beginning with Lindesmith (1947), provided an advanced understanding of the symbolic and interpretive meanings of addictive behavior. Additionally, Lindesmith's classic study of opiate addiction (1947) showed the crucial cognitive and cultural components of becoming an addict. Specifically, Lindesmith (1947) found that symptoms of withdrawal alone were not enough for the development of addiction, but in fact those addicted to opioids had to use the drugs use frequently before becoming physiologically dependent. However, these addicted persons had to learn, usually from other addicts, in order to recognize that they were experiencing withdrawal and that using the drug again would alleviate those withdrawal symptoms (Lindesmith 1947). Finally, Lindesmith (1947) elucidated that the addicted persons had to decide to take another dose, and to do so repeatedly, until these

individuals came to view themselves as addicts and to accept the addict identity. This study and other sociological research posit that social processes involved in addiction are not reducible to drug molecules “hijacking” the brain, but instead require interaction with and learning from other addicts in particular cultural contexts (Lindesmith 1947; Becker 1953, 1967; Weinberg 2011). These contributions by Lindesmith (1947) and other sociological works related to addiction, demonstrate the importance of accounting for sociologically-contingent variables that influence the experience and occurrence of addiction. However, such these studies also attempt to negate the effects that changes in neurocircuitry have in terms of influencing the addicted person’s motivation to recurrently use drugs. Obviously, one must take into account the time period in which these sociologists were conducting their research, but the assertions contradicting the impact of well documented neurophysiological and neurochemical changes must be jettisoned (Volkow & Koob 2015; Volkow et al. 2016).

Ultimately, social theoretical perspectives on addiction are valuable for the purposes of developing a comprehensive framework, first because the sociological macro-analytic approach to addiction demonstrates the centrality of an interactive dynamic between individuals as well as various environmental influences (Granfield & Cloud 2001; Granfield & Reinarman 2014). This constitutes a significantly broader approach to studying addiction than is typically done in the neurobiological research (Lindesmith 1938; Weinberg 2012; Granfield & Reinarman 2014; Heilig et al. 2016). Second, from the outset, sociological research helped expose a variety of myths surrounding addiction, which were based on misconceptions, attributional biases, and politics that reflected and helped reproduce asymmetrical power structures in the society (Duster 1970; Peele 1985; Weinberg 2011; Granfield & Reinarman 2014). The influence of such historical, cultural, social, and contextual factors on the development of addiction is widely

recognized in the sociological literature (Granfield & Reinarman 2014). However, these findings and social theoretical perspectives have been largely neglected the genetic, developmental, and physiological aspects that are also vital to forming a more complete understanding of addiction.

The Social Side of Recovery

Recovery from addiction is a controversial concept with ambiguous definitions, but it refers to more than simply abstinence from using the drug (Granfield & Reinarman 2014).

Although, research within the biomedical model of addiction focuses on stopping drug use and improving neuronal functionality, sociological studies indicate that among other factors, social capital is vital for initiating and sustaining recovery (Cloud and Granfield 2008; Granfield & Reinarman 2014).

The conceptual lens of social capital can provide insight into the nature of cessation of problematic drug use by foregrounding the social bonding within a recovering network and the change in social capital that might occur during the recovery process (Cloud & Granfield, 2008; Schuller, 2007). Social capital defined as relations that provide valuable resources to individuals through participation in social networks (Coleman 1990; Putnam 2000). Granfield and Cloud (2001), noting a direct correlation between social capital and recovery, coined the term “recovery capital” and defined it as the combined physical resources, skills, knowledge, and social capital available to a recovering person. Additionally, strategies used to increase recovery capital include engaging in alternatives activities to that of drug use and creating new relationships to take the place of old drug relationships (Cloud & Granfield 2001). Introduction to new social networks is critical for sustained recovery; yet treatment programs often destroy drug-using networks without linking people to new social networks beyond recovery networks, resulting in recovering addicts returning to their communities with little diversity of social networks

(Herbeck et al. 2014). For example, a recent study focused on network dynamics of recovery capital among drug treatment participants found that while the treatment program achieved severing ties to participants' old networks, it was not very adept at fostering ties to new positive social networks (Zschau et al., 2016). Their findings show the need for more effort to be placed on linking participants to mainstream networks centered on meaningful activities outside the treatment environment (Zschau et al., 2016).

Similar to recovery capital, the concept of social recovery also draws from social capital theory but with greater focus on social relations (Boeri et al. 2014). Social recovery directs attention to the process of acquiring the skills, resources, and networks that enhance people's ability to live a healthier lifestyle in mainstream society (Boeri et al. 2014). Furthermore, social recovery is an inclusive conceptualization that favors a harm reduction approach to ameliorating the problematic social aspects of addiction, through social relations and social roles that increase social capital (Boeri et al. 2014). This approach suggests that one avenue to recovery would be to work at the environmental level to build the social capital of individuals and of the communities where they reside. In this regard, treatment may be more effective if it is directed at enhancing the available social capital of addicted persons as opposed to focusing on the individual's drug use independent of the social context that surrounds that person, much like the biomedical and neurobiological model. Peele (2000) notes that addicted individuals improve in their recovery when their relationships to work, family, and other aspects of their environment improve.

Research Gaps

There have been many studies concerning treatment of opioid addiction, and most of them have been quantitative and focused on how addiction is developed physiologically (Volkow et al. 2014). Such research is important for understanding addiction, however, it sheds little light on the many sociological precursors to addiction and the social conditions that influence the

recovery process (Granfield & Reinarman 2014). Furthermore, Laudet and Humphreys (2013) noted that biomedical research “may be ill suited to addressing some recovery oriented questions, especially regarding community based peer recovery supports” (254). More research is needed that examines the lived experiences of those in recovery to gather information about the principles and practices that underlie the initiation and maintenance of recovery (Laudet 2007; Laudet 2008). Additionally, a number of researchers (McIntosh & McKeganey 2002; McKay 2005; McKay 2016) have highlighted how, compared to other areas of healthcare, the views and opinions of those in recovery for opioid addiction are less frequently obtained in order to shape the planning and delivery of services. White (2014) proposed need for more research into how long-term recovery is managed, to inform the development of effective recovery services. Together these recommendations reinforces the importance of gaining the views and experiences of people in recovery from opioid addiction in developing and delivering appropriate services.

Current Study

Reiterating what was stated in the introduction, this thesis will present the findings of a qualitative study considering the recovery experiences of thirty-eight individuals recovering from opioid addiction in central Pennsylvania. The aim of the study is to gain an advanced understanding of the complex process of recovery, in particular the relationship between neurophysiological, behavioral, sociological, and environmental factors involved in initiating and maintaining recovery by detailing the stories of those in recovery. The study will also consider how the participants conceptualized addiction and made sense of their journey to overcome opioid addiction. Finally, the thesis with a discussion about the ways in which research and treatment must take on a recovery-oriented perspective in order to better support the long-term recovery process of those suffering from opioid addiction.

Chapter 3: Methods & Data

In my introduction I indicated that this research is an exploratory endeavor employing ethnographic and qualitative methodologies. In this chapter, I consider the design and procedure of the current study which explores how people suffering from opioid addiction beginning and maintain the recovery process. The major methodological techniques used in this study included participant observation and focused life history interviews. All the data collected were analyzed using the methods of grounded theory (Glaser & Strauss 1967). The chapter gives the reader an understanding of the type of data collected, its meaning to the participants involved and the process by which the data was analyzed.

Although not all are mentioned specifically in the text of this study, I depended greatly on a wide array of authors, methodologists and theorists in developing my research approach. I am greatly indebted to these theorists and ethnographers and their influence can at times be seen in my work. Included in the list of those who have been most influential to me are: Anderson 2000; Becker 1953, 1967; Erikson 1976; Geertz 1973; Farmer 2001, 2003; Glaser & Strauss 1965, 1967; Milofsky 2008; Silva 2013; Stack 1974; Van Maanen 1988; and Wolcott 1999.

Qualitative Methodology

Qualitative methodologies are non-statistical methods of inquiry and analysis of social phenomenon drawing upon inductive processes. In recent years, there has been an increase in the use of qualitative research methods in studies of addiction, however, these methods are largely underutilized as indicated by the literature on addiction (Rhodes 2000). Qualitative methodologies focus on people's perceptions of their own experiences, and thus capture the richness of human experience (Strauss & Corbin 1994). Accordingly, these methods allow for

theories to emerge from the analysis of observational and verbal data gathered from a smaller sample of participants than is typically needed for quantitative research.

Research Rationale

Charmaz (2006) asserts that qualitative methodologies are most appropriate when the area of research has little existing evidence or theory. Despite the growing body of research examining recovery from addiction research, there is still very little research considering the recovery process, specifically, from opioid addiction (White 2014). Moreover, it has been suggested by Charmaz (2006) that a qualitative approach to research is befitting when there is a broader research topic rather than a specific research hypothesis, as with this study.

The aim of this research was to gain a greater understanding of the recovery process from the perspective of those in recovery from opioid addiction, instead of testing out hypotheses based upon existing theories. Consequently, a qualitative approach allowed me to conduct an in-depth exploration of participants' perceptions and experiences.

Theoretical Underpinning of the Study

The grounded theory approach is a qualitative methodology originally developed by Glaser and Strauss (1967). This approach to qualitative analysis with "its systematic techniques and procedures of analysis enable the researcher to develop a substantive theory that meets the criteria for doing 'good' science: significance, theory-observation compatibility, generalizability, reproducibility, precision, rigor, and verification" (Strauss & Corbin 1990: 31). Grounded theory was developed to facilitate the process of theory generation during a time where research methods were focused on hypothesis testing and quantitative methods. Thus, grounded theory was intended to analyze qualitative data in such a way to reveal relationships between conceptual

categories and identify the circumstances under which theoretical relationships emerge, change or are maintained (Charmaz 2006).

Since the advent of the grounded theory approach, two different forms have been developed which include: constructivist and objectivist (Charmaz 2006). The constructivist version views data collection and analysis in relation to the shared experiences of researchers and participants, thus acknowledging how the relationship between researchers and participants may affect data collection and analysis (Charmaz 2014). Research using the constructivist approach demonstrate how participants construct meanings and actions by getting as close to the experience as possible. From a constructivist viewpoint, the data is located within the time, place, culture and context of the participants' experiences (Glaser 2012). This type of grounded theory approach provides an interpretive portrayal of the studied world, rather than claiming to portray an exact picture of it (Charmaz 2006). The researcher aims to gain a better understanding of participants' implicit meanings of their experiences, and to develop a conceptual analysis of them (Glaser 2012).

The objectivist approach suggests that meaning lies in the data and the grounded theorist discovers it (Strauss & Corbin 1990). Therefore, the researcher attempts to maintain "value-free neutrality" (Charmaz 2006: 132) by taking a position of distance and separation from the participants in order to reduce bias as much as possible and focus on discovering theory in the data (Strauss & Corbin 1990).

It is important for any qualitative researchers to consider the theoretical underpinnings of their methodology in order to avoid overly influencing the data collection and analysis with their own theoretical position. I recognized that a grounded theory approach could be influenced by a number of factors including participants' understanding of questions and the research in general;

and my own perspectives and ability to make interpretations of the data within an appropriate context. Therefore, I took an objectivist approach to grounded theory in order to reduce the potential concerns stated above.

Participants

Participants were recruited via snowball sampling and convenience sampling methods. These approaches to sampling usually entailed me asking the clinic director of the Addiction Help Center, and key informants that were in recovery if they would be so kind as to introduce me to others whom they knew would fit the appropriate profile. This usually meant others recovering from opioid addiction. I aimed to make the sample as heterogeneous as possible in terms of age, gender, and recovery experiences.

The final sample for this study consisted of 38 individuals. Twenty-five were individuals in recovery, 8 parents of recovering individuals, a local physician, and the director of the Addiction Help Center were recruited and interviewed. Of the 25 study participants that were in recovery from opioid addiction, only 15 of them had gone through the program at the Addiction Help Center. The remaining 10 participants in recovery were partaking in the peer-support group meetings at the clinic, or were at least familiar with the Addiction Help Center. All participants that were people in recovery from opioid addiction, were selected if they were previously addicted to opiates or opioids, had received some type of formal addiction treatment and are presently either recovered or in the process of recovery.

Research Setting

This study was conducted in Coal Brook. Coal Brook is a pseudonym that refers to a collection of three small towns in the Anthracite Coal Region of Pennsylvania. I have chosen to put all the towns under this changed name to protect the identities and confidentiality of my

participants. Much of my participant observation and focused life history interviews were conducted at a small drug and alcohol rehabilitation clinic referred to as the Addiction Help Center (see Appendix 1). This facility is located along Pennsylvania Route 61 at the entrance to one of the towns. The entire facility includes three buildings, with the main clinic building being on the far right side of the property and is demarcated by an enormous, fire truck red sign that reads “Addiction Help Center” hanging directly above the front entryway. Inside the main clinic building, there is a large conference table and lounge area as well as three office spaces. My participant observation was carried out while meeting with participants, their parents, and the staff at the clinic in the lounge area or at the conference table. Additionally, I also met with participants at a seating area just outside the entrance to the clinic. Many of my focused life history interviews were done in one of the offices that was not being used.

Participant Observation Methodology

A hallmark research method used in qualitative research, and more so in ethnographic research is that of participant observation (Wolcott 1999). Participant observation requires that the researcher make observations while participating in an authentic role within the group, activity, or culture. In the case of my study, I spent 6 months working as an intern at the Addiction Help Center which allowed me to interact with the clinic staff, those in recovery, and their family members on a daily basis. Typically, I would meet with the director of the clinic as well as persons in recovery when they came to the clinic for meetings, treatment, weekly therapy sessions, drug tests, and daily “check ins.” I also met with parents and other family members of the recovering individuals when they attended weekly family meetings or simply drop in to speak with the clinic director. At the end of each day, I would leave the field setting and write up

detailed analytic field notes based on my observations and experiences. These notes were my initial attempt to provide a narrative of the participant's story of addiction and recovery.

Focused Life History Methodology

A life history interview can be broadly described as the story a person tells about the life he or she has lived. Atkinson (1998) describes a life history as “a fairly complete narration of one's entire experience of life as a whole, highlighting the most important aspects.” For my research, I chose to conduct focused life history interviews that target a particular aspect or set of events in a person's life, in this case, the recovery from opioid addiction. The focused life story approach helped provide me with access to the world of the participants and to the environment being studied. Along with other qualitative and ethnographic methods, this method allowed me to make sense of how people perceive and experience their recovery in their specific contextual frameworks.

For the focused life history interviews, an interview schedule was constructed and used as a guide that provided a clear set of topic areas. The interview schedule used open-ended questions which provided the opportunity for the interviews to become more of a directed conversation between myself and the interviewee. The focused life history interviews usually began by me prompting the participants to talk about the events surrounding the initiation and maintenance of their recovery. Therefore, much of the interview consisted of the participants telling their story as I listen attentively, only interjecting periodically to probe for more information about a particular aspect of their story. This method enabled participants to talk about their experiences and views in detail and depth. I did not record the interviews, but rather took brief notes throughout the interview and wrote elaborate, analytic field notes once the interview had concluded. All interviews were conducted in a private room at either the Addiction Help Center

or the office of probation that was convenient for the participant. Focused life history interviews lasted between 1 hour and 3 hours.

In some ways the collection of focused life histories, as they were utilized in this study, are a natural extension of participant observation. I gained access to individual's life stories through various participant activities, specifically attending peer-support and family meetings at the Addiction Help Center, and via other methods of informal socializing. Therefore, I believe that focused life history interviews were an appropriate data collection method for this study.

Data Analysis

The data collected in the form field notes from my participant observations and focused life history interviews were analyzed using the grounded theory approach. The major focus of grounded theory analysis is on the process of ordering and organizing numerous ideas which have emerged from the data and the various steps of the data analysis (Charmaz 2014). This is accomplished through the use of a coding paradigm and the generation of concept indicators and core categories (Charmaz 2014). These indicators (e.g., life histories) are compared for similarities, differences, and consistencies of meaning (Charmaz 2014). This process generates an underlying uniformity which then becomes a coded category (Charmaz 2014). These codes are then refined for best fit. Further properties of categories are generated until the codes are verified and saturated yielding nothing new. This type of data collection, coding and reexamination of all data for the life of the research, is vital (Charmaz 2014). It is a dynamic rather than a linear process, that is, there is a doubling back and forth of the data analysis for the throughout data collection and analysis (Charmaz 2014). This type of internal comparison maximizes verification, and hence credibility, by analyzing the differences and similarities of the internal comparison groups (Charmaz 2014). In this way I was more certain about the sets of

structural conditions of my research findings. In a sense, this type of qualitative analysis has its own built-in replication process.

The use of a coding paradigm includes four broad areas of phenomena to consider while using various levels of coding: 1) conditions; 2) interactions; 3) strategies and tactics; and 4) consequences (Strauss 1987). The purpose of this is to allow the researcher to think more systematically about the data. Briefly defined, “conditions” correspond to the events which lead up to or produce a certain phenomenon (e.g., the decision to begin the process of recovery). Customarily, one's participant will point out such conditions by using terms such as "because" or "on account of" (Strauss 1987). On the other hand, “interactions” refer to the responses and exchanges among participants regarding specific phenomena (Strauss 1987). “Strategies and tactics” relate to the course of action taken by the participants in response to a specific phenomenon (Strauss 1987). Finally, “consequences” represent the outcomes of the “strategies and tactics” that are coded for in the data (Strauss 1987).

Besides the categories used for coding the data, there are three coding phases in grounded theory analysis: 1) open coding; 2) axial coding; and 3) selective coding. Open coding is the initial type of coding one does with new data. This process involves a general search for categories and is unrestricted in nature. This coding process began by conducting a line-by-line analysis which generated a considerable number of descriptive categories. The aim of open coding is to "open up" the inquiry (Charmaz 2014). All interpretations should be kept tentative at this point. Open coding quickly forces the researcher to begin to make sense of the data and to start the process of constructing theory (Charmaz 2014).

The next step is axial coding, a more systematic and intense form of analysis performed around one category (axis) at a time. Axial coding, which is more concrete, makes more

rigorous use of the coding paradigm (e.g., conditions). This process begins to create cumulative knowledge about relationships between one particular category and others (Charmaz 2014).

There is not a smooth transition from open coding to axial coding. Instead, there is a back and forth process in which data is analyzed and compared to the data which came before it.

Finally, selective coding pertains to the delimitation of the coding to only those codes that relate to the core codes and which have emerged through the open and axial coding processes (Charmaz 2014). The researcher now begins to look for the conditions, interactions and consequences that relate to key code categories, and codes only for them. Accordingly, these key codes become the guide for further theoretical sampling and theory building (Charmaz 2014).

Methodological Limitations of the Study

There are always limitations in any research study, and thus it is important to be clear what these were and what impact such limitations may have had on the outcomes of the study (Wolcott 1999). A significant limitation of this study is the sample size of 38 participants, which may have impacted on the generalizability of the findings (Atkinson & Flint 2001). However, a sample size of 38 is generally regarded to be appropriate for a grounded theory study, and it is argued that as long as sufficient contextualization is provided, a smaller number of participants can be sufficient for the emergence of common themes amongst the participants' data (Charmaz 2014). I set out to recruit a heterogeneous sample consisting of men and women of varying ages, with diverse narratives of addiction and recovery. However, all of my participants were white and occupied relatively the same social class status. The homogeneity of my sample may have further weakened the generalizability of my findings. Nonetheless, the purpose of this exploratory research was to gain a better understanding of the process of recovery via examining

the lived experiences of those recovering from opioid addiction. This thesis was not attempting make any causal or definitive conclusions about the nature of addiction or recovery.

Qualitative research is often criticized for using purposive sampling, such as snowball sampling, rather than random sampling (Atkinson & Flint 2001). This study may have benefitted from using random sampling as most of the participants were contacted by the directors of the Addiction Help Center or other study participants, thus biases may have resulted from the way in which participants were recruited. Snowball samples may be biased towards the inclusion of individuals with inter-relationships, and therefore can overemphasize cohesiveness in social networks and may miss “isolated individuals” who are not connected to any network that the researcher has tapped into (Atkinson & Flint 2001). In the case of this study, the sample did not include individuals that are currently using drugs or those that did not successfully initiate recovery, therefore their perceptions and experiences are not captured in the data. The problem of selection bias was addressed, in part, through the use of the grounded theory approach. The grounded theory approach to qualitative analysis, as previously stated, contains a type of built-in replication process that strengthens the credibility and generalizability of the study findings.

In addition to self-selection bias, there is also the issue of gatekeeper bias (Atkinson & Flint 2001). The “gatekeepers,” or individual that grants you access to the research setting, may bias the sample in a way that favors their interest. For example, the director of the Addiction Help Center may have tried to protect the integrity of his program by directing me to only the participants that successfully initiated and maintained their process of recovery. One way I addressed this issue was by asking the participants and family members of the participants about anyone who relapsed or did not graduate from Tom’s program.

In spite of the potential biases, I determined that based on the constraints of studying a hard-to-reach populations, like former drug addicts, the sample size and snowball sampling approach were appropriate for the purposes of this thesis.

Ethical Concerns

Prior to starting the study, ethical approval was obtained from the Bucknell University Research Ethics Committee. Prior to participating in the study, participants were provided with an informed consent sheet and the opportunity to ask questions about the study and their involvement. The informed consent sheet outlined confidentiality and explained that although the interviews would not be recorded, field notes would be taken. Additionally, the sheet noted that all identifiable information would not be included in the field notes. Participants were reminded that they were free to withdraw from the study at any time, and that this would not affect the care they received. Once participants were satisfied they provided written consent.

Chapter 4: No One Recovers Alone

The literature reviewed showed that addiction and recovery are sociologically contingent in multiple ways and therefore emergent and indeterminate to a greater degree than is commonly recognized (Granfield & Cloud 1999; Granfield & Cloud 2001; Cloud & Granfield 2004; Granfield & Reinarman 2014). Recovery is not simply abstinence from drug use, but is a complex and dynamic process in which the addicted person voluntarily maintains a lifestyle that is characterized by sobriety as well as personal and social health (Laudet 2008; White 2014). This process does not occur in a vacuum, but is influenced by contextual characteristics in the person's social environment (e.g., social support from family members) which influences both the initiation and maintenance of recovery (Granfield & Cloud 1999; Granfield & Cloud 2001; White 2014). To explore how individuals suffering from opioid addiction recover from their dependent drug use, this chapter explores the experiences of recovery. Specifically, the chapter will offer four case examples that give a voice to those individuals in recovery from opioid addiction as well as those who have supported them during their recovery. In addition, the chapter will conclude with a discussion of the emergent themes that arose from grounded theory analysis of the field notes and life history narratives. The themes include: 1) parental support, 2) the importance of having children, 3) changing social networks and 4) employment and social activities.

Down but Not Out

The chronic administration of opioids and other drugs of abuse, and the resulting addiction has dramatic effects on distinct neurocircuitry in the brain as a consequence of biochemical interactions (Volkow et al. 2004; Koob & Volkow 2010). However, developing an

understanding of how the long-term drug use and addiction to the drug that lead to those neurophysiological changes, must begin with the common as well as unique sociological factors that predated and attenuated these complex processes (Granfield & Cloud 2001).

Correspondingly, the same can be said for discerning the ways in which addicted persons terminate their drug use, and undertake sobriety and recovery (White 2014). With this in mind, this section details the narratives of four study participants that exemplify the myriad of social and personal factors mentioned by all study participants in their narratives of recovery.

Qualitative Case Examples

With the help of the researcher, life histories were developed by four participants as a way of clearly remembering certain aspects of their lives and placing them in relationship to certain significant events in their process of recovery. The researcher-written descriptions of each participant and their life are augmented by verbatim quotations from field notes on certain significant events. Pseudonyms are created for each participant, and specific identifying characteristics are either omitted or generalized to protect the confidentiality of the participants.

Case 1: Mary

I first met Mary while I was working as an intern at the Addiction Help Center. After talking to me about this study and its goals, she volunteered to be interviewed, feeling that she had a different, important story to tell. At the time of the interview, she had been actively involved in her recovery for six years.

Mary, a thirty-one-year-old woman, is a lifelong citizen of in Coal Brook. She grew up in a “family-oriented household,” living with her mother, father, and paternal grandmother

throughout her childhood. Mary's parents both worked, her father as a businessman and her mother as a waitress at a local diner. She explained that during her teenage years, despite the importance of family, her parents "fought a lot and really didn't get along that well." During these fights, Mary would leave the house and walk around the town or ride her bike to see her friends. Throughout her teenage years and into early adulthood, Mary did not have a very strong relationship with either of her parents and typically spent most of her time away from home.

When Mary was in high school, she struggled both socially and academically. She constantly felt overwhelmed by the demands of school work, in addition to "constantly feeling socially nonexistent because of my shyness." As a result of this perpetual stress, at age 14, Mary began smoking marijuana. And at 18, after moving in with a boyfriend, she began using heroin, to which she was initially drawn for its effects of "relieving stress and erasing my worries." She recalled the first time snorting heroin, and how enjoyable the experience was:

My boyfriend put a pile of white powder on the table next me and told me to snort some of it, because it would make me feel better. And he was right, as soon as I inhaled, I immediately felt so relaxed and free. I remember feeling like all of my stress and anxiety melted away. I was always worrying about everything, and never felt comfortable in my own skin. But when I snorted that dope, it made everything better. I was able to escape my problems in a matter of seconds, and I never wanted to wanted that feeling to stop.

This was also the moment, looking back on her, when her addiction started. Mary continued to use heroin, initially by nasal insufflation and then later intravenously, for twelve years. Throughout this time she had a job at a local hardware store, and used her paychecks to fund her growing dependence on heroin. Mary described herself as a "functional addict, because no one knew she was struggling with drugs other than my boyfriend and the other people that used with us."

However, a short time later, her father found out about her drug use and became involved. Mary's father showed up at her work one day and told her boss that she was no longer going to work there, explaining that she was suffering from drug addiction. She vividly remembers the events of this day: "My dad picked me up from work that day and told me that he knew about my drug problem. He took my phone away and told me that I didn't have a job anymore so that I had no way of getting dope or any other drugs. He gave me ultimatum, I could either come back home and get help, or stay with my boyfriend and never be welcome in my parents' house again." Mary recalls being enraged by her father's actions, but agreed to come back home and seek treatment. She attended a 28-day rehabilitation program in a nearby town. Although she was able to go through the detoxification process and momentarily stop her drug use, once the program ended she found herself sneaking out of her parents' house at night to "shoot up" with her old friends. Mary pointed out that:

I didn't want to start using again right after I went to rehab, but I missed the feeling so bad. Rehab was helpful when I was at the facility, but as soon as I left I started feeling really anxious again. When you're at rehab there is no way to get dope, it is like you're in a different world. But when you leave and go back to the real world, the opportunities and desire to use again are there, even if you just got clean. As soon as I got in the car to go back home, I started worrying about using again and about how my parents would react. It was like being in high school all over again, except this time it wasn't school work or being left out that made me feel completely worthless and hopeless. I guess it is weird to think about, I used dope to get rid of my stress but I was stressed about what would happen if I started using again. This is how terrible addiction is, it draws you in even when it is the very thing you're trying your hardest to avoid.

Mary continued to use secretly, until her father caught her again and sent her back for another round of rehabilitation at the same facility.

After completing rehab for a second time, Mary left her parents' home and began living with a man that she had met at the rehab program. Shortly after moving in with her new boyfriend, she became pregnant and was immediately inspired to stop using heroin. She went

through the pregnancy and delivery well, and did not use any drugs for two years after her son was born. However, when her son was just over two years old, she began using heroin again. Mary explained: “Being a first-time mom was extremely stressful. I would always be exhausted, having a child is the hardest job in the world, especially for someone who does not deal with stress or anxiety well. I couldn’t take it anymore so I got some dope from a dealer I knew, because I thought it would help me deal with everything. I thought I could be a better mom if I wasn’t so anxious, but using only made me worse.” Once again, her parents discovered that she had reverted back to using heroin, however; instead of sending her away to rehab, they filed a lawsuit to take custody of her son.

Losing custody of her child was a major motivator that led Mary to enter into another 28-day rehabilitation program, followed by additional treatment for 9 months at an outpatient clinic in New York. Over that nearly year long period, Mary was able to concentrate on addressing her issues not only with addiction but with her inability to cope with stress and anxiety. During her time in treatment, her father would visit her each week and spend time talking to her about her progress. Mary expressed that: “I am a unique case, most addicts are stuck with no way out and don’t have anyone to support them. But I had a much easier time getting into recovery because of my dad. His supportive and encouraging talks were what helped me to stay on track while I was in treatment, I couldn’t have done it without him, he never gave up on me”.

Following her third time going through rehab and then additional treatment, Mary was able to abstain from drug use and has continued to do so to this day. Now in stable recovery, she has regained custody of her son. Mary currently lives in an apartment with her son and has a job at a local restaurant.

Case 2: David

David volunteered to participate in the study after hearing of its goals from the director of the Addiction Help Center. Additionally, David's mother also offered to be interviewed for this study after meeting me at one of the information sessions at the Addiction Help Center and learning that her son was participating.

David, a 38-year-old man from Coal Brook, has been in recovery for eight years. During his childhood and through into his freshman year of high school, David was exceedingly athletic. He played football and baseball from the time he was four-years-old. Growing up his father coached and inspired him to be a high-level athlete. In school, David was a distinguished honors student, which was fitting because his mother was a teacher at the local elementary school. David was well respected amongst his peers and all who knew him.

When he was 15-years-old, he contracted appendicitis and was rushed to the emergency room at the local hospital for surgery. After the surgery, David developed a rare post-surgical infection and began experiencing intense pain. In order to reduce his extreme discomfort, his surgeon prescribed him morphine for the 18 days that he remained in the hospital. This extended exposure to morphine led to the onset of David's iatrogenic addiction, or addiction that originates in the course of medical treatment (Musto 1985).

Soon after coming home from the hospital, David complained of severe headaches, muscle pain, and vomiting; all hallmark symptoms of withdrawal from opioid use (Koob 2008). At this point, his parents did not know what was happening to their son. David recalled feeling unbearably sick and having incessant cravings for morphine during the first month after returning to school:

Sitting there in class was just awful. I was in pain all day long, it was like I never got the surgery and I still had a burst appendix. But instead of my side hurting, it was my whole

body. I couldn't concentrate that's how much it hurt. And all I wanted was that morphine that the doctor gave me. It made me feel so much better, I could relax and never had any pain. As soon as I left that hospital and couldn't get anymore morphine, I started going crazy. Everyday at school that's what I thought about, not math or english or even football, I just wanted to get more of the good stuff [morphine].

Less than a year later, when David was a sophomore, he tried Oxycontin for the first time after being given a few pills by a friend on the football team. He talked about the pure elation and requiescence that he felt after taking the pill: "It was a sudden rush followed by a calming and dreamy high. It is kind of like what it feels like after you have sex. I had been chasing my first high for a while and after using the Oxy I knew I found that feeling again."

However, the euphoric sensation did not last, and soon David was experiencing the same paralyzing pain and withdrawal symptoms as he had upon leaving the hospital. Consequently, he began using the pills on a regular basis until his friend could no longer supply his addiction. The day David ran out of pills, his mother recalled, "was the day that her son became a nightmare." His mother explained that: "He would be out all night, and I knew he was buying pills or looking for them somewhere. I never knew where he was, and that scared me more than I could ever put into words. I would search for him throughout the night and then worry about him all day, because I never knew if I would get that call [from the police] that my son had overdosed." Over the next few months, David dropped out of high school and decided to get his GED. He, then, got a job working construction for a local contractor. Shortly after starting this job, at age 17, he was introduced to heroin and thus began a 9-year period marked by severe addiction, overdoses, and homelessness.

When he was 26, David moved back in with his parents to seek refuge but not get help for his addiction. In the time between beginning his street life and returning home, he had "had two children and got divorced, which made things even harder." David was firmly convinced

that he was never going to give up his dependence due to the stress of being a father, in addition to his struggles with finding a job and a home. He explained further:

I didn't have a chance, maybe if I would have continued to be a big time football player. I would have. But everyone knew I was an addict, and that means no wants to hire or even be near you. Minimum wage jobs aren't enough to help raise two children and pay child support. I felt trapped and hopeless, and when you feel that way all you want to do is mix up a little bit of that dope [heroin] into a needle and make all your worries disappear. The only problem is they don't disappear, they only get worse. Because then, if you're always buying dope, you don't have money to feed your kids, let alone pay for rent or whatever else. It really is a nasty cycle, like they say, you use to feel better but if you keep using it only makes things worse and worse. That is why I overdosed, I couldn't take it anymore. I just thought everyone would be better off without me.

Despite his disheartening discussion of an attempted suicide, David remained in his parents' home, and continued to use quite regularly. His parents tried tirelessly to convince him to go to treatment, however, he told them that he "wanted to recover on my own." After two years and no change in his lifestyle, his mother became discontented with finding drugs in his room and seeing him day-after-day laying in a drug-induced stupor on the floor. Accordingly, she kicked him out of the house. Although, she still worried about his well being and would regularly call the local police to look for and check up on him. She even went so far as to have David arrested when he showed up, "high out of his mind," at her home one evening. David recalled this event: "I was so high that I forgot that I didn't live there anymore. My mom wasn't happy when I came stumbling through the front door, so she called the police because that was only thing she could do for me at that point. I will be honest, I wasn't mad in the slightest, I knew I needed help and so did she. And it was that night I spent in jail which became a big turning point for me." Upon being released a few days later, David, with the help of his parents, checked into a 30-day rehabilitation program in Harrisburg, Pennsylvania.

David only made it through 18 days of the program before he became frustrated and decide to punch another patient in order to get kicked out the program. He repeated this behavior at the next two rehabilitation programs that he attended. After quitting those programs, David returned to a life on the streets and was arrested a short time later for drug possession and inability to pay child support. During his second stay in jail, his mother tried everything she could to make sure he had help when he was released. She recounted the story for me:

I am a well-known member of the community, as a teacher, and I had built up a lot of connections around the area. One of my friends knew the district attorney at the time, so I called on him to ask for help and set up a deal so that David would get help and not just more jail time or worse. I also asked the district attorney if he would work out a deal with the child support judge so that David could earn some money to pay off the fines without being arrested again. Because I knew he [David] would never get better if he was getting arrested all the time. Thankfully the district attorney and the judge were very understanding, and they helped me find the Addiction Help Center, which David went to after his sentence.

David was released from jail after 40 days and was sent to live at the Addiction Help Center. At the clinic, he joined the continued care program and worked closely with Tom, the director of the clinic, for the next 9 months. During that time David was able to stop using all opioids, and even obtained a job with Tom's help. David explained why this program was so helpful for him:

Tom knew exactly what to do for me. At rehab they just treat you like everyone else. You detox. You go to group sessions. You see a shrink [psychiatrist]. It might work for some people, but it didn't help me at all. I still thought about how terrible of a parent I was and how worthless I am, which made me want to use again. The people at rehab didn't get that, they would just yell at me. But with Tom, he makes sure you are keeping off the stuff [heroin], but he also helps you figure out why you are doing drugs to begin with and what other things there are for you to do with your life, even when you're an addict. He allows you to find the things you used to love and forget about the dope. If it weren't for my mom finding him and Tom helping me, I would have probably overdosed and be dead in an alleyway somewhere.

David is now in active recovery and has eight years of sobriety, as previously mentioned. When this interview was conducted, David was remarried, had recently gained partial custody of his children as well as purchased his first home, and was working as a construction leader. He now has a full and active life.

Case 3: Beth

Beth and I met during a family support meeting held at the Addiction Help Center, while I was working there as an intern. After a conversation in which I related the details of this study, Beth disclosed that she would be a participant for the study and offered to be interviewed. Beth was proud of her accomplishments and excited to share her journey. We met several times at the Addiction Help Center and spoke at great length about her experiences leading from a place of addiction and despair to one of hope, recovery, and success. I also interviewed Beth's father during one of our meetings, his voice is also present in this account.

Beth was 35 years old at the time of the interview. Born in 1982, Beth was raised in a small town adjacent to Coal Brook. She grew up in an apartment that was located above her grandparents' business. Her grandfather, like her father later, was a family physician that owned a private practice. She is one of five children that lived in the apartment with their mother, father and four siblings. Her father, worked as a physician for her grandfather's private practice and her mother was stayed at home to watch the children.

Throughout her childhood, she remembers playing with her siblings quite often and going on a number of family vacations. In elementary school, Beth was an active child, joining the cheerleading squad and the soccer team. She continued to be energetic and engaged student well into high school. Although it was not sports or cheerleading that peaked her interest, but art

classes and taking part in the school's musical performances. At age 14, Beth was began smoking marijuana with a few classmates after musical practices. She explains: "I was a follower, and it seemed like a fun thing to do at the time. I didn't really like the smoke in my mouth. But I liked the way that weed made me feel. I had a lot of social anxiety, being a theater geek, so it was nice to be able to calm down and chill." Throughout the remainder of high school she did not try any other drugs beyond smoking marijuana occasionally with a few friends. Beth graduated high school and started at a small technical college, close to home.

When Beth was in college, she lived in an apartment with three girls that had gone to her high school. These girls would hold parties in the apartment almost every weekend, and "began bringing lots of drugs to these parties." Initially, Beth did not try any of the many drugs that she was offered. However, over the course of the semester, she became overwhelmingly stressed due to the amount of academic assignments she was being given. The stress, she was experiencing, became increasingly worse and she eventually reduced self-care and stopped taking her antidepressant medication. Taken together, this set of events led her to use prescription "painkillers" at one of the weekend parties. She recounted in detail the events from her first time using opioids:

I was so depressed that I couldn't even get out of bed most days. I did my work ,but never went to class, I felt like a sinking ship. I never had that amount of work in high school, so it was really stressing me out. On a Friday night, one of my friends came into my room during a party, which I obviously wasn't attending even though I was there. She handed me a small sandwich bag filled with large white pills and told me that it would cheer me up. I wasn't stupid, I knew it was hard drugs but at the same time I felt worse than I ever had before. So you can probably guess what happens next, I popped one of the pills and the rest is history. Those pills made me feel like I could do anything, I wasn't depressed or anxious anymore. No, I was invincible, at least until the drugs wore off and I needed to take more. But it wasn't just the feeling, I also loved being able to hang out with other people and get high. Using isn't some solemn event, it was a time where you could get to together and enjoy being fucked up with lots of people. I really felt like I belonged when I was using pills with my roommates and our friends.

In spite of the feelings of belonging and the relieve from her struggles with mental health, Beth began abusing more and more drugs. She quickly switch from simply taking prescription “painkillers” to snorting heroin and eventually using heroin intravenously. Ultimately, this only made her issues with completing course work even more challenging as she resorted to getting high and staying home in her apartment. She elaborated on this portion of her story saying: “ I would wake up, shoot up, and be fucked up everyday. I didn’t go to class anymore, and I didn’t even care. I was so caught up in the unbelievable sensations that I got from using, that I didn’t even realize I had a problem. But the truth is, I had a huge problem. One that almost consumed me.”

It was not until her parents received a notice from her college that she was failing and came to check on her, that Beth got any sort of help. Her father immediately pulled her out of school and took her home so that she was not surrounded by the influence of her roommates and others that contributed to her addiction. Beth along with her siblings and her parents held a “family meeting to discuss going to rehab.” Her father recounted the details of that meeting: “ She was incredibly upset and confused, but I could tell she wanted to stop. But she didn’t want to go to rehab. She wanted to try getting better on her own and I wanted to respect her decision. As a doctor, I know that for any patient, especially an addict, they have to want to get better and you can’t force them. So I told her that I would support her as long as she got a job or transferred to another college. I didn’t want her around those girls anymore.” Following this supportive and open-minded discussion, Beth decided to go to college at a different university four hours away from home. She explained her decision: “ I knew if I was going to get clean, I needed to stay away from the dealers, my old friends, and anyone that used with me. Most of those people lived close to home so I tried to get far enough away that they couldn’t get back into my life.”

She started at her new college the following year, and had not been using any drugs for almost 5 months at that point. In the first semester, she began smoking marijuana again to help with her anxiety over school work. Eventually, she began going to parties again and would trade her marijuana for other drugs at these events. Beth also started dating a “frat boy,” who would give her Oxycontin, which he had for a sports-related injury. Soon, Beth fell back into severe dependence on opioid “painkillers”, but this time she did not fall behind in her school work. She described her second experience with being addicted: “I still got that same melting into a chair feeling that I got when I first started using. You know, it is like an orgasm every time, no wonder people get addicted to this stuff. But I didn’t stop going to class or taking care of myself like the first time I was on Oxy. I think it was because I wasn’t using heroin this time, it was like I was a maintenance user. I would just take enough to get the feeling I wanted and then nothing more. I was still addicted, but no one at school really knew and my parents certainly didn’t.”

Despite her purportedly controlled use of the drugs, she knew that this type of lifestyle was not sustainable after college. This realization was the beginning of her journey out of addiction. In her junior year of college, during spring break, Beth witnessed her friend fall from a second-story window and become paralyzed from the waist down. Her friend had just “shot up and thought she could fly, or something so she jumped.” Beth vividly remembers the moment she saw her friend fall:

I was laying by the pool and I knew they were inside getting high. I didn’t want to use any dope [heroin], so I stayed outside. Then I heard a lot of noise from the second floor of the house, so I looked over and saw Ally standing on the window sill. But before I could even yell or get any words out, she was on the ground and I thought she was dead. After I ran over to her and saw the mess, that was once my friend, I broke down. I completely lost it and had a panic attack. All I could think about was getting away from drugs, because I knew one of my other friends might be next. Goddammit, maybe I would be next.

Once she returned to school, Beth completely discontinued her drug use. She became more involved with the theater productions. I wanted to get back on track and have good grades, I didn't want to be a druggie anymore." She also sought out a different friend group so that she was no longer constantly exposed to opioids and other drugs. A short time later, she discovered that she was pregnant. The pregnancy became another positive "push factor" that motivated her to "stay clean and have a healthier lifestyle." She explained further:

I knew after my first visit to the OB, that I wasn't just caring for myself anymore, but I was a mother now. Being pregnant really motivated me to stay away from drugs at all costs. It was like I wanted this responsibility, I feel most people are really freaked out about having a kid, but I was excited. Pregnancy, for me, was this freeing experience. What I mean is that it took my mind off of the cravings for pills or dope, and I needed that so desperately.

She carried the pregnancy to term and the delivery was a success, she was the mother of a baby girl. Later that year, she also graduated from college. After graduation, she returned to Coal Brook and began working at the local high school, helping with the theater department. During this time she began experiencing severe depression and anxiety, which she attributed to being worried about her baby's well-being. "I was so worried about her safety and whether I was being a good mother," she commented. Beth continued: "It was so hard being a single mom, living in a tiny apartment. I just didn't know how to deal with all of those negative thoughts and feelings. And I started thinking about how relaxed and composed I felt when I used pills. These thoughts started to really scare me even more than I already was." Consequently, she called her father and begged to move in with him so she could have support, both financially and emotionally. Her father eagerly agreed, and moved his daughter and granddaughter in with him.

Over the next two years, Beth remained in her father's home and counseled with him each day, discussing any urges she had to return to drug use. She cited these therapeutic and

helpful discussions as “the only thing that got me through those dark times.” Beth expounded on the importance of the relationship she has with her father, especially during those years:

Without my dad, I would be lost or dead. I wouldn't get to come home every day to my little girl. He really saved my life. Even though I wasn't doing drugs at the time, my mental state was a disaster. Every day I thought about and talked about shooting up or finding some pills from someone in town. And every day he would sit me down and talk it through with me. He would let me voice my emotions and try to explain why I wanted to use again. Then he would walk me through all the reasons why using wouldn't help me, but would actually make everything worse. The weird thing about all this is that he never yelled at me about wanting to get drugs, he would just calmly give me advice and tell me that he loved me. And his words were like magic, because I never used and I still haven't to this day. I owe everything to my dad for standing by me, even when I was at my worst and basically giving him my kid.

Today, Beth has been drug-free for 15 years. Earning a master's degree in fine arts was always a goal for Beth. However, she was not able to pursue that goal because of financial instability, caring for her baby, and struggling to sustain her recovery. After years of long-term stable recovery and moving into her own apartment, she recently re-entered college. At the time of the interview, Beth was completing an online master's degree. Beth still works at the local middle school, where she has helped start a theater and acting program.

Case 4: Alex

Alex was recruited to this study by Tom, the director of the Addiction Help Center, who encouraged him to tell his unique story of recovery. He agreed to be interviewed. Initially, Alex was apprehensive about participating, being unsure of my motives and my understanding of drug use and addiction. After an hour-long discussion during which I disclosed my intentions for the study, Alex and I were able to easily discuss many and varied aspects of his struggle out of addiction. During a follow up meeting with Alex, I was able to conduct an interview with his

mother as well. Her experiences with her son's addiction and recovery appear throughout this case description.

Alex, now 40, has been living in Coal Brook over the last year. He grew up in a town roughly twenty-five minutes away from Coal Brook. During his childhood, Alex's mother worked as a bank teller, and his father was a civil engineer. He was always expected to do well in school and be involved in a range of activities, including boy scouts.

In high school, Alex joined the ski club and participated in a special technical training program for high school students. When he was a junior, his parents divorced, leaving him miserable and confused. His parents' divorce took a major toll on his mental health, and he began to show signs of depression. Throughout the rest of the school year, Alex distanced himself from his parents and started sleeping at different friends' houses. During this hiatus from home, he was introduced to marijuana and began smoking the drug on a daily basis. He distinctly remembers the first time he used marijuana:

My buddy from the ski team knew I wasn't doing so good. I mean I was sleeping at his house every other night, obviously that's not normal for any teenage kid. So on the way to school one morning he gave me a blunt [marijuana cigarette] and told me to take a hit, because it would level me out. He told me I was too serious and pessimistic, and that I needed something to get me out of the funk I was in and just fucking relax already. So I took a long drag and immediately felt that head rush you get from weed. It was fucking awesome. Not as good as dope, but it was still super relaxing. And for a little bit I wasn't concerned about my parents splitting up.

Alex continued to smoke marijuana until he graduated high school. After graduation, he went to a technical school and was trained in welding. Subsequently, he was hired as a welder for a natural gas company, but was laid off after only a brief period. During the time when he was unemployed, he was cited with a DUI for drinking and driving. Following this incident,

Alex knew he would likely not be able to get another welding job any time soon, and decided to move to South Carolina with his girlfriend at the time.

In South Carolina, Alex got a job at a car wash and eventually landed a position as a welder at a local factory. His girlfriend became his wife, and within two years she was pregnant with their first child. A short time later, they decided to move back to Pennsylvania to be closer to Alex's family when the baby was born.

Back in Pennsylvania, Alex was hired at as the head welder at a playground company near his hometown. He worked at this company for 6 years, during this time his wife became pregnant again. Later, when his son was 3-years-old, the child contracted a nearly fatal, viral infection and was hospitalized for 4 months. This situation put a strain on Alex's marriage, and ultimately his mental health as his depression returned in full swing. Not long after his son had returned from the hospital, Alex developed diverticulitis and was rushed to the emergency room after collapsing on the job. He was taken into surgery immediately, and the procedure was a success. Over the course of his recovery following the surgery, Alex was prescribed Vicodin, a prescription opioid for pain relieve.

Alex did not become addicted to the opioid medication initially, however, a few months after he returned home from surgery a number of catastrophic events occurred that he believes to be the events that led up to his addiction. He wistfully recounted these circumstances:

Around 3 months after I got back from my surgery, things started to fall apart. After my son almost died and then I got sick, I didn't think it could get any worse. But it did, everything went to shit. First, my wife filed for a divorce because she couldn't deal with the stress of having a sick child and a sick husband. The divorce was a disaster, my wife turned into a monster. I lost my house and a bunch of other stuff during this fucked up process. Not to mention, I could barely get around because of the pain from my surgery. And this is where things get really bad. I got fired from my job for taking too many sick days. Now I'd lost my wife, my home, and my source of income. I was fucked, royally fucked. I had nothing, and it started ripping me apart. I couldn't think straight.

Nearly a year later, the divorce was finally over and Alex had moved in with his mother. Despite the suffering he endured, the one positive outcome from his divorce, was gaining full custody of his children. Although, this meant that he was “a single father who lived with his mother and didn’t have a full time job.” Due to the degree of adversity and stress that Alex had faced, his depression worsened and he was given a prescription for antidepressants by his psychiatrist. In addition to taking the antidepressant, he was still taking Vicodin at the time for recurrent pain in his lower back, which was result of the surgery.

One day he “accidentally mixed up the medications and took a huge dose of the Vicodin.” Alex explained that: “I didn’t realize what I did until it hit me. It was like someone just removed all the discomfort in my life. All the heartache. All the worrying. All the sleepless nights, feeling hopeless. It all disappeared when I took too much Vicodin.” After experiencing this “incredible release,” he stopped using his antidepressant and simply took heavy doses of Vicodin instead.

He would constantly visit his doctor and ask for more pills, until eventually the surgeon figured out what Alex was doing and stopped giving him refills. Without his prescription, Alex began experiencing symptoms of withdrawal. He would lay in his bed all day and writhe in pain. Eventually, he turned to stealing pill bottles from neighboring homes. However, he did not always have a consistent supply, so he would often go through withdrawal.

His mother noticed that he appeared to be sick quite frequently and that he had given up on looking for a job, and even taking an interest in his children. Finally, she discovered a stash of pills under his bed and she realized that he was suffering from addiction. She spoke despondently about the time following her mortifying ascertainment:

I knew I needed to get him help. He would just lay in his bed or on the floor of his room for hours, sometimes even days. I thought he was sick, and to this day I regret not figuring it out sooner. He wasn’t working and barely took care of

himself, let alone my grandchildren. I knew that he couldn't care for them so I did the hardest thing in the world, and filed a suit for custody of the children. Once that legal matter was taken care of, I tried to get him into treatment, but he wouldn't listen to me. I didn't want him to be without his kids, but he needed help and I didn't want my grandchildren seeing him like that.

After losing custody of his children and being asked to enter into treatment, Alex decided to move out of his mother's home. "At the time, I hated her for taking my kids and for trying to stop me from using," he explained. Thus, Alex began "a life on the street" and was largely homeless for the next 3 years. Over this time, he was "introduced to heroin by a group of addicts" that he had befriended. He used heroin intravenously for nearly 5 years, until he showed up at his mother's home one night asking for help. She welcomed him home with open arms and sought to get him help. However, in the weeks following his arrival back home, Alex showed "no interest in stopping his heroin use." Accordingly, his mother became frustrated, but continued to support him and again tried to convince him to seek treatment.

One evening, Alex "shot up a bigger dose than ever before," and became quite delirious. "When I saw him that night, I got so scared that I didn't know what to do, so I called the police," his mother remarked. The police arrived and took Alex to a nearby medical center to be checked out. During his stay at the medical center, he was put on a 72-hour hold. Alex's mother recalled the action she took during this short window of time:

I called everyone I knew and asked for help. I didn't know where he should go or what the best treatment program was for him. Then one of my coworkers told me about the Addiction Help Center in Coal Brook. I grew up in that town, and happen to know Tom, the director. So I called Tom and begged that he help Alex. Thank God for Tom, he spoke with the arresting officer and worked out a deal to have Alex brought to the clinic once he was out of the hospital. After Alex was released from the 3 day hold, he went straight to see Tom and that was the day Alex started getting better, I swear to you.

Alex spent over 3 years with Tom at the Addiction Help Center. Throughout that time, he went through detox at an inpatient clinic and received the Vivitrol shot, a monthly treatment to reduce the chance of relapse. Alex, much like David in a previous case, counseled with Tom on a regular basis and worked with him to find a job. Alex explained:

Talking to Tom is like therapy, but better because he isn't assessing you like a psychologist or something. He is trying to help you feel whole again and be okay with who you were before you started using. You know, it starts with getting the Vivitrol shot or going on Suboxone so you can keep the addict thoughts out of your head. Then he works with you to help you enjoy things again, like he got me this welding job and it helped me so much. I couldn't have been happier. Then once I worked for a while, I was able to see my kids again. It was like Tom gave me my life back just by the time to work with me. Those discussions really made me see that I was so much more than an addict.

At the time of the interview, Alex had been clean and sober for over a year. He was doing very well with his sobriety, and have even regained custody of his 2 children. Alex currently works as a contracted welder for local businesses and recently purchased his first apartment. Despite his long and daunting path to recovery, he is enjoying his life once again.

The Social and Personal Side of Recovery

Emergent Themes

Various themes arose during the grounded theory analysis of the field notes and researcher-written life histories, which correspond to the social and personal influences that motivated the study participants to both initiate and maintain the process to recovery. The major themes noted were:

- (1) parental support;
- (2) the importance of having children;
- (3) changing social networks; and

(4) employment and social activities.

1. The theme of *parental support* appeared in all the life histories in this study. The participants were assisted by either their mother, father, or both in their decision to begin recovery. Additionally, all participants indicated that help from their parents was a crucial factor for continuing the process of recovery, even to this day.
2. In the *importance of having children* theme, over half of the participants interviewed described having children as a motivator for terminating their drug use and beginning their recovery. Many of these participants also cited losing custody of their children as major push factor for beginning recovery and regaining custody as a driver in sustaining their progress. All participants indicated that the desire to be a good parent was major influence throughout their recovery.
3. All the participants similarly described the value of *changing social networks*. In each life history, the participants discussed disassociating themselves from drug-using friend or peer groups as a first step in initiating their recovery.
4. A key component that characterized the maintenance of and progression through recovery were *employment and social activities*. In fact, involvement in some form of occupation was recognized by all participants as a positive and rewarding, alternative activity to using drugs. For some of the participants, participating in social activities (e.g., theater performances) allowed them to reduce cravings and drug-seeking behaviors.

In this next section, each of the four themes is discussed, and the participants' own comments pertinent to the theme are presented verbatim.

Parental Support

Each of the participants highly valued support from their family, especially their parents, as important in their lives and recovery. All the participants seemed to illustrate the significance of one parent, either their mother or their father, but not both parents during their decision to “get clean and stay clean.” For all the participants, a parent was the first person to discover their drug use and confront them about their struggles with addiction. Additionally, each participant was encouraged by a parent to enter a rehabilitation or treatment programs; and a few participants’ parents even paid for their treatment. Staying with or moving into a parents’ house was also cited by the participants as another major resource that allowed them to either initiate or continue their recovery. Finally, parental support in the form of a long-term, emotional invest in the participant’s recovery as well as “therapeutic” parent-child discussions were seen in each life history.

David’s mother gave up her job and almost lost her marriage in order to supervise him during his long period of active drug use. David felt that without “her constantly checking on me and making sure she knew where I was, I would probably still be out there using.” It is important to note the type of emotional, instrumental, and informational support that David’s mother provided him, which acted as a mechanism for raising his self-esteem and allowing him to see that he was not in fact “hopeless or worthless” as he described himself. David discussed his mother and her caring, invaluable role in his recovery:

My mother spent years of her life trying to help me through my addiction. She would always give me pep talks and try to get me to see that this wasn’t my only option in life. Even though I destroyed her trust in me and became something of a nightmare, she never gave up on me. It wasn’t until I saw how much my mom cared that I started realizing that I wasn’t alone and that I hadn’t lost everyone. That really motivated me to want to be better and get better, even though I didn’t for a really long time. Hell, she even put up

with me leaving rehab like three times. On top of that, she made sure I got into Tom's place [Addiction Help Center] after I got arrested. It was at Tom's place where my recovery really happened, and I would never have gotten there without my mom. I say this over and over, but without my mom I am not here today. I promise you that.

The unrelenting, parental drive to ensure the safety and security of a child suffering from addiction was evident in each of the above cases. This long term, supporting investment by a parent was a common thread in many life histories. Here, David commented on the weekly visits that he would have with his mother during his time at the Addiction Help Center:

While I was living at Tom's place, my mom would come see me every Monday. We would sit inside on the couches at the clinic, or outside if it was sunny, and just talk for an hour or so. I would get to tell her about my progress and how I was feeling. It felt really nice to have someone other than Tom to talk to about my recovery. It was like when you get a sticker in grade school or win a trophy and then you tell your mom all about it. I got to tell my mom that I was finally getting better, and I think that pushed me even more to get clean. I have been saying this, ever since my mom came to visit me that first week at Tom's place... No one recovers alone.

As noted Boshears and colleagues (2011), supportive interactions with family that bolster positive emotions and increased self-esteem are vital not only for beginning recovery, but for maintaining it. Beth too spoke about the benefits of having a meaningful parent-child relationship. Here, she outlines the time living with her dad and their daily conversations, both of which acted as powerful agents of support:

I lived with my dad after I had my daughter. My dad really helped me financially and emotionally. He helped me pay for diapers and baby food and that stuff. He even watched my little girl when she was a baby, on days when I was not feeling the best. But he also took time to talk to me each day about how I was feeling about going through recovery. And I really appreciated that, because when I first moved in, I really struggled with wanting to use. He kept me accountable and gave me the kind of backing I needed to stay clean during that time.

The theme of parental support is common among individuals in long-term sustained recovery (White & Kurtz 2006); this is something that I noted as participant observer at the Addiction Help Center. This study's respondents, in this instance Mary, also shared details about the much needed aid and support that she received from her father throughout her addiction and recovery:

He was there from the beginning, when my addiction really started to get bad. He was the first person to call me out for having a problem. I was so mad at him that day he picked me up from my job and told me that I need to stop hurting myself. I think I was mad because I didn't want to accept that any of it was true, that I was a drug addict, that I was ruining my life. But if he didn't come get me and talk to me about where I was going wrong, then I have no idea if I'd even be off drugs at this point or alive for that matter. The crazy thing about my whole situation was that he [her father] wasn't even pissed off at me, he just wanted me to get out that lifestyle, to get away from the dope. Now he wasn't easy on me, but he still loved and cared for me even when I was at rock bottom trying to get clean. I'm grateful for my dad each day because of all that he has sacrificed for me. He saved my life.

Alex shared the gratitude he feels towards his parents, especially his mom. Indeed, he too can remember how valuable it was to have a parent that provided him with emotional backing and acted as his only advocate during the agonizing moments of his addiction, and initiation of his recovery:

I still remember holding my knees and rocking back and forth while my mom tried to calm me down. This was back when she first found out I was an addict. She tried to convince me to go to rehab somewhere, but I wanted to recover on my own. So she just supported my decision and sat by me for hours when I would go through withdrawal..... And that time I was really bad, she made sure that the police came and took me to the hospital. I won't lie, I hated her for doing that for a long time. But once I got to the Tom's place, I knew she did the right thing. Like, I would've gotten arrested if she didn't work with Tom and the officers to get me the right kind of help, you know. It sucks feeling all alone like no one understands your pain, but she knew I wasn't a bad person or some piece of shit. She knew that I was suffering so she did what nobody else did, she spoke up for me and helped me when I needed it most.

Interactions with family members, especially parents, acts as a mechanism for ensuring that the person suffering from addiction does not feel abandoned, which would only worsen their addiction (Mallick 2003). Alex recalled that his mother supported him unremittingly even when he stopped taking care of his children and himself. Alex remembers his mother as the one person that never left his side, through his complications with surgery, through his divorce, and through all the trials of his addiction. For Alex and the other participants, as in other studies, the availability of social and emotional support from one's parents was instrumental in motivating the addicted person to launch their recovery as well as carry on with the process (Granfield & Cloud 2001; Laudet 2007; Laudet 2008; White 2014)

The Importance of Having Children

Becoming pregnant, or already having children motivated the participants, in this study, to enter into recovery. All the participants reported that not only did having a child drive them to "get clean," but ensuring their children's care and wellbeing was paramount in keeping them from relapsing. Additionally, a number of participants indicated that the loss of custody, and subsequent desire to regain legal rights to see their child spurred them to forgo their drug use and initiate recovery. Pregnancy and parenthood offers addicted individuals the chance to take on influential, social responsibilities that serve as a turning points in their journey out of addiction (Cloud & Granfield 2004; Hser et al. 2007). Beth recalled the feelings she had when she became pregnant shortly after stopping her drug use:

I will never forget the moment when I saw the results of the test. I immediately burst into tears, tears of joy. I know it sounds weird but I had been looking for that missing piece in my life, that thing to keep me from turning back to drugs. And I finally had it, I was going to have a baby. I couldn't have been happier because I knew that I wasn't just living for me anymore. Using had already fucked me up, I didn't want the same for my baby. At this point, I hadn't been

using for about 3 months but this was the extra push that kept me from going back and it has to this day.

Beth's pregnancy inspired her to avert the use of opioids, and remain steadfast in her mission to reach sobriety and a better quality of life. As Keegan et al. (2010) observed, pregnancy among women suffering from addiction was significantly associated with increased levels of motivation to change drug-using behavior. Mary elaborated on this concept:

Finding out that I was going to have a baby scared me to death. I was terrified that I might fuck it up because I was still using when I found out. I knew sitting there in my car holding onto that test that I needed to stop what I was doing or I would be ruining not just my life, but my unborn baby's life too. So I drove home as fast as I could from the CVS, rushed into the bathroom and flushed all my bags of dope. And somehow I didn't use for the whole time I was pregnant. I don't know how or why my little boy was able to help me stop, but he did at least for a little while.

Here, Mary recounted her motivation to stop using drugs for fear of harming her child in utero. The responsibilities of being a pregnant mother, in this case, allowed Mary to discontinue her use of opioids throughout her pregnancy. However, it is important to note that once the child is born, the temptation to use drugs can often return. In many cases, if a parent returns to active drug use following the birth of a child, they often lose custody (Grella et al. 2006). The loss of custody, for participants in this, acted as fundamental influence on their decision to begin working on their recovery. Alex acknowledged that losing his parental rights played an important role in the early stages of his recovery:

When I went to get clean at Tom's place, he asked me like he does everyone, what's one of the reasons you want to get better. I told him that I wanted to a lot of things, but the main thing I wanted was to take care of kids again. I loved being a father, I never wanted to lose them. So one of my main goals in starting my recovery was to be a better father and regain custody of my son and daughter. I thought about them everyday, and just thinking about them or talking about them to Tom got me through a lot tough times when I wanted to use again.

Similar to Alex's narrative, Padgett and Drake (2008) found that when addicted persons had a relationship with their children, either real or hoped for in the future, they were positively motivated to recover from their addiction. Furthermore, regaining custody of one's children was cited as an aspect of cultivating a long-term stable recovery (Laudet & White 2010). For David, the impact of regaining partial custody and reestablishing a relationship with his children has seemed to benefit his recovery, even to this day:

I have been clean for almost nine years now, but I only recently won back partial custody of my children. I would see them from time to time when I was just beginning my recovery and I think that really helped push me to be better and improve quicker. But finally getting at least partial parental rights again was a win I needed. I want to be able to see my kids, I love being a father now that I'm clean. It gives my life purpose again, I was so down on myself and depressed for so long. But when I see them [his children] it reminds me of why I am still here, why I stopped using, and why it needs to stay that way.

Overall, the participants' narratives demonstrate that being a parent, reuniting with their children, and the desire to forge a strong parent-child bonds were decisive factors influencing their choice to get help and recover.

Changing Social Networks

Changing one's social network assisted many of the study participants by reducing the impetus of drug use, freeing them from non-supporting peer influence, and facilitating the joining of prorecovery social groups. Vaillant (2003) found that one of the key determinants of long-term abstinence and recovery was the ability to find a supportive, non-drug using, social network. Participants in this study indicated that moving away from "old druggie friends" or "other users" was a fundamental step in initiating their recovery. Mary explained further:

One of my biggest problem was going back to the same type of people every time I left rehab. I would come home and go find some old druggie friends of mine, or meet up with

a new dealer and their people. And every time I would use again, and start that fucking awful process of using too much, getting caught, and going back to rehab. When I got out of rehab that third time, I didn't go out and see any of those druggie friends. That was a big turning point for me, because I figured out that if I wasn't in that crowd I probably wouldn't use as much or at all. I mean I didn't have direct access to dope and I didn't have anyone to get me high so it made it that much easier to stay clean.

Mary emphasized the “make or break” decision to avoid her former social group in order to be successful in her third and final attempt at permanently abstaining from drug use. Adaptive social network changes that increased an individual's social abstinence self-efficacy have been shown to be one of the mechanisms that exerted the most influence during recovery (Dingle et al. 2012). For Beth, she went so far as to transfer to a different college to escape the drug-using friend group she once belonged to:

Transferring school was one of the greatest things I did for myself and my recovery. Yes, I used and had issues at the other college I ended up going to, but not nearly as bad as when I lived with those roommates. After getting caught by my dad and going through that family intervention, I didn't really wanna go away to treatment. But at the same time I knew I had to get away from the people that got me into this whole mess. Good friends don't give you heroin, good friends don't hurt you. Those three girls were not good friends. So I left and for a while I actually stayed clean.

In accordance with Beth's narrative, Moos (2007) posited that both disassociating from social groups that were not abstinence-focused and forging social bonds with people that supported the person's efforts to recover were ingredients for long-term stable recovery. Shifting out of a drug using network, spurred David to get help for his addiction:

Going to my mom's house, high as fuck that one night, and then getting arrested was my best option at the time. Because I knew if she took me in, or if I got arrested that I wouldn't go back to those junkies that I roamed the streets with back when I was a hardcore addict. Every time I was around that group, I would bum a syringe from someone or share a bag of dope. We didn't try to help each other, we just wanted to get high with people or at least find someone who had some dope they were willing to share. I guess I knew deep down that I was looking at two options if I stayed with those people,

jail or death. When you're really struggling like I was, you need people that are going to look out for you and do their best to keep you off drugs, not supply you with them.

For David, having friends, family, and others in his social network that actively encouraged his choice to recover made all the difference for him.

Employment & Social Activities

All, but a few of the participants in this study articulated that gaining employment was a major accomplishment that marked their progress and served as motivation during their process of recovery. Previous studies have indicated that the goal of gaining employment as well as finally obtaining a job is important throughout the recovery process (Waldorf 1983; Cloud & Granfield 2008; Duffy & Baldwin 2013). Employment increases legitimate income and provides the recovering individual with a legit role in society, which in turn can improve living standards (Granfield & Cloud 2001; Cloud & Granfield 2008; Laudet & White 2010). The majority of study participants also elucidated that engaging in new and rewarding social activities, as alternative to drug-use, served to promote further prorecovery enthusiasm. For Beth, becoming more active in the theater department during college was one of the keys to her recovery:

Being involved in the theater at school was almost therapeutic. This is going to sound weird but it was almost like medication for me, I got my daily dose of excitement and fun, and then I was good. I mean I used drug to self-medicate so when I got more involved in theater performances and directing, it was like I had found the substitute to popping pills that I needed. Doing stuff with the theater also puts you around a lot of energetic, positive people that really help keep your mind off all those negative thoughts about yourself, about being an addict.

In Beth's case, adopting a more active role in the theater and engaging with others who shared her passion for the performing arts allowed her to stave off the cravings and impulses that correspond to drug-seeking behavior (McKay 2016). Beth's narrative corroborates a study by

Boeri, Gibson, & Boshears (2015), which found that new social activities and ways of social interrelating were shown to be key aspects of successful recovery. Beyond simply seeking out new and appealing endeavors, a number of the study participants emphasized how central employment was throughout their recovery, from the outset to the present. Discussing the importance of getting a job for his recovery, Alex recalled:

Welding wasn't just my work, it was my passion and a huge part of who I am. So when I lost that because my drug use, it made me even more depressed and we all know what happens at that point. But it was different once I got through detox. I started working with Tom, I finally had the chance to do my work again. It didn't come easy, I worked my ass off to prove to Tom and myself that I wasn't going to use anymore. But when I finally proved it, I got the option to work as a volunteer welder at a machine shop near Tom's place. Being able to pick up that torch again and weld was better than dope, it gave me a rush that I haven't stopped chasing. For me, work is what pulled me out of that pit I'd been in for so long. Don't get me wrong, I had other things pushing me to recover, but I think getting that welding job was the final push to keep me out of addiction.

As mentioned by Laudet and colleagues (2009), being employed can improve the recovering addict's self-confidence and facilitate positive social interactions that reinforce the recovery process. Like Alex, David, also felt that striving to gain employment was a decisive factor that motivated him to abstain from further drug use once he began recovery. Additionally, David spoke about how overjoyed he was upon receiving an offer to work as a carpenter:

I didn't really work for like 16 years, because I was addict. I just sat around all day and only moved to shoot up the dope, and then I'd go back to laying in bed. But after getting a carpentry job through Tom's program at the clinic, I had a whole new perspective on life. I mean I finally had that experience of not feeling worthless and like an outcast. I had a real job, with a real paycheck and benefits, it was incredible. Ever since I started at that job, I really stop thinking about using so much. There is just something about working a hard day's labor that makes you feel good, it makes you feel like you have something to hold on to.

Finally, obtaining employment is important for persons who had often been stigmatized and discriminated against because of their substance use history (Laudet & White 2010).

Conclusion

This chapter presented some the ways in which the participants' life conditions and social environment impacted their addiction and recovery. Reviewing the life histories of those in recovery from opioid addiction through interactive interviewing revealed certain themes: parental support, the importance of having children, changing social networks, and employment and social activities. Although the participants' histories varied in the details, they all had a kind and supportive parent, valued their children and appreciated the responsibilities of being a parent, identified the significance of being engaged socially or occupationally, and joined new non-addict social networks, all of which aided in their process of recovery. In the next chapter of this thesis study, I will discuss the indispensability of the CRBD theory of addiction in addition to the associated neurobiological research and medical treatments in regards to the participant's experiences in addiction and their understanding of recovery. The data-driven explanations in Chapter 4, much like in this chapter, reflect the views of the participants in the present study.

Chapter 5: If You're Sick, You Need Medicine

In this chapter, I move beyond an analysis of sociologically-contingent factors that influenced the participants' experiences of addiction and recovery in this study. Instead, I examine the compelling, and at times hidden, role that neuroscience research and medically-assisted therapies (MAT) have in shaping the experiences of addiction and recovery as told by the study participants. However, before beginning the chapter, it is important to note that a number of social scientists have viciously critiqued the biomedical or chronic relapsing brain disease (CRBD) model of addiction (Volkow et al. 2016). Specifically, research and treatments that follow from the CRBD model has been criticized for disadvantaging homeless addicts (Bourgois & Schonberg 2009), and furthering the physical and social suffering of marginalized heroin users (Garcia 2008; Garcia 2010) While I recognize the importance of such scrutinizing, the participants in my study were not hindered, but helped by the evidence-based medications associated with the this model. Therefore, I do not offer the type of scholarly condemnation forecasted by Nancy Campbell (2010) and the other aforesaid social scientists. In contrast, I attempt to expose the effectiveness of neurobiological research and medical treatment interventions based upon the concept of addiction as a brain disease (Volkow et al. 2014). Specifically, using a grounded theory perspective, this chapter explores the way in which the participants' narratives demonstrate the value of neuroscientific advances in understanding and treating addiction. The chapter focuses on one particular participant, Benjamin, and his biomedicalized narrative of recovery. Finally, the chapter will conclude with a discussion about the effectiveness of different MAT drugs for addiction, and the necessity for such treatments during recovery.

The “Brainy” Addict

Prior to delving into a discussion of the data and subsequent conclusions, I found it fitting to introduce the participant who is the focus of this chapter, Benjamin. I met Benjamin at the Addiction Help Center, as I did many of my participants. After talking to him at length over the course of a few weeks, he volunteered to be interviewed, feeling that he had an uncommon perspective to share. At the time, he had only 4 months of sobriety, but was serious about his recovery.

Benjamin is a 24-year-old year man, who grew up in southern New Jersey. He was raised in a very poor environment. His earliest memories were of living in a cramped, run-down two bedroom apartment in the down area of a large city. When he was only three-years-old, his father left the family shortly after his only sibling, a younger brother, was born. Benjamin’s mother worked two jobs, and typically was not home. As a child, he spent many nights without adult company or supervision, made dinner, and cared for his younger brother.

At the age of 15, he and his younger brother were placed in foster care after it was revealed that their mother was an abusive alcoholic. Benjamin recalled “I fucking hated being with my foster family, I just wanted my mom back.” Only 2 years later, at age 17, he dropped out of high school and began “hanging out with a street gang” that he had recently joined. One evening, while living with a few of the gang members, he was introduced to heroin. That night began a destructive 2 years long affair that was characterized by severe addiction to heroin and prescription opioids, four near fatal overdoses, and a series of criminal arrests.

At the age of 20, Benjamin, addicted and distraught, elected to move in with aunt who had recently migrated to Coal Brook. He recalls looking for any avenue out of his, then, “toxic lifestyle.” A year after he arrived at his aunt’s house, he discovered the Addiction Help Center

and met the director, Tom. Benjamin struggled throughout his first few months “to stay clean and be seriously interested in his recovery.” Eventually, with Tom’s assistance, he was able to set up an appointment with a private care physician and obtained a prescription for Suboxone, a pharmacotherapy used to relieve opioid cravings and withdrawal symptoms. He emphasized that without the Suboxone he would not have been able to “stay off drugs and move forward in recovery.” Having the Suboxone helped him “forget about using and that was big a step towards a life in recovery.” Despite the benefit of having MAT, Benjamin “fought with Tom, kicking and screaming” throughout his first year at the center. Tom once remarked about those moments with Benjamin: “He just didn’t know what he wanted out of life, and that made him angry. I mean, who wouldn’t be upset in that position, you know.”

Things began to improve when Benjamin’s aunt started visiting him from time to time, bringing him home cooked food and staying to talk about his abstinence and recovery. Over time, with the increasing support of Tom and his aunt, Benjamin embraced his decision to abstain from drug use and recover from his addiction. Continuing his Suboxone treatment and his involvement in Tom’s continued care program, Benjamin was able to propitiously maintain his recovery. At the time of the interview, he was entering his fifth month of sobriety and was still living at the Addiction Help Center. Although he was in active recovery, he told me, “I still struggled at times with stress and other stuff, which makes staying in recovery that much harder.”

In spite of the intriguing nature of Benjamin’s life history, it was his intricate explication of the “tormenting urge to go back to shooting up” that he combatted during his addiction, and even now in his recovery, that inspired this chapter. Additionally, the perceived benefits of using

pharmacotherapies to aid in the process of recovery, as espoused by Benjamin and other study participants, afforded further rationale for the chapter.

When Experience and Neuroscience Align

The previous literature has indicated that the ontogeny of addiction is comprised of three stages: binge/intoxication, withdrawal/negative affect, and preoccupation/anticipation (Volkow et al. 2016). These three stages are conceptualized as feeding into one another, becoming more intense with recurrent use, and ultimately leading to the pathological state known as addiction (Koob & Volkow 2010). For the purpose of this chapter, I will focus on the withdrawal/negative stage, which is typically viewed as major barriers to halting drug use and maintaining long-term recovery (White & McLellan 2008).

In this section, I will describe Benjamin's intense and captivating narrative of struggling through the anguish of withdrawal and falling victim to preoccupation over opioids. The text to come also links Benjamin's embodied experiences with research findings about specific changes in the neural pathways of an addicted individual. Furthermore, Benjamin's account of the perplexing compulsions to use drugs again, even in the midst of his recovery, is analyzed against the prominent, neuroscientific notion of hedonic homeostatic dysregulation (Koob 2008).

When the Withdrawal Hits

Nearly all of my participants, minus a few exceptions, talked about the “painful, confusing, and disorienting” nature of withdrawal. However, none of the individuals I met with or interviewed, provided the type of detailed and animated story of experiencing withdrawal symptoms that Benjamin recounted. During an evening at the Addiction Help Center, Benjamin

asked me: “Do you know what is like to be addicted? Have you ever pushed that plunger down, watching that shiny black liquid flow into your arm, knowing that you’ll be doing this again in a few hours?” I responded in the negative, and he expressed that, “you can’t begin to understand how I got here unless you know exactly how it was when I still had dope everyday.”

Benjamin proceeded to tell me at length about what it means to be addicted. He began by recounting how he felt during his initial experience with withdrawal symptoms:

You use because it makes you feel fucking amazing. Like I was on top of the world when I first started with dope. It was like a little pick me up each time I got a little bump [snorting the drug], or took the time to shoot up. But after a while, like a month or two, I didn’t have as much money and my boys back didn’t want to give me any. One time, I hadn’t really used for like a few days and then it hit me. I can remember it like it was yesterday. It was the worst pain of my life, I was sweating and freezing all at the same time. I felt like absolute shit. My head hurt so bad, I thought I was going to die and honestly I wanted to. On top of all that, I was like super depressed over nothing. I was really fucking confused and scared.

Drug discontinuation in chronic opioid drug users often triggers an intense, acute physical withdrawal symptoms, much like the ones that Benjamin described (Volkow & Li 2004). In addition to the physical symptoms of withdrawal, there are acute as well as protracted changes in the person’s affect that include dysphoria, irritability, and emotional distress.

Benjamin elaborated on this aspect of his withdrawal:

A lot of people have depression. A lot of people get upset real easy. A lot of people feel like shit sometimes. But imagine if all that was happening at once. Those first few days without dope were like hell. I thought I was going insane. I was so fucking sad that I didn’t even want to get up. The headache and muscle pain had something to do with that too, but still, it was bad. And every time someone came around me I would go off and get really pissed. I had heard about withdrawal from other guys but I never it was like this. You never think that not having a little bit of dope could make you feel so fucking bad. Depression doesn’t even begin explain how lifeless I felt.

Benjamin felt trapped and helpless under the crushing weight of the combined physical and emotional discomfort. He recalls, “I truly thought I was going to die. So I called all my guys, like everyone I knew asking for just a little hit. I needed some dope. It was the only thing I knew would fix this unbearable feeling. Withdrawal is like a sickness and you’re doing everything you can to get better.” As Koob and Volkow (2010) affirm, the stage of withdrawal is characterized by “a correspondingly intense motivational push to escape the discomfort associated with the after effects of use” (p. 223).

On the next day, Benjamin’s calls for help were finally answered when one of his “gang buddies brought over an Oxy pill”. He vividly remembers being overjoyed and feeling a sense of relief upon seeing the pill. “I promptly crushed up the pill, added a few droplets of water, and heated the solution in a coffee cup. Then I sucked it up in a fresh syringe and shoved the needle into my arm. Pushing that shit into my vein was all that I needed,” he recalled. Administration of the opioid drug during a period of withdrawal will temporarily relieve the impairing symptoms, but these symptoms quickly return once the effects of the drug dissipate (Koob & Volkow 2010). For Benjamin, “shooting up again” was extremely gratifying. He illustrated the sense of happiness and relaxation he felt over remedying his dreadful, first encounter with withdrawal:

I flopped down on the couch and just sort of loosened up. I was so relieved, all the pain started to disappear and the sadness was gone. I felt like me again. I felt normal. Laying there, just feeling the dope working, it was amazing. I’d never been happier to have some dope in my life. The only thing is, my boy who brought me the stuff, said that I would need a lot more if I was keep the withdrawal sickness from coming back. After hearing that I didn’t really think about it too much, I was too busy loving that feeling.

This was only the beginning of Benjamin’s “rollercoaster ride through the twists and turns” of his addiction. An addiction, lasting for two years, marked by the constant need to combat withdrawal and related symptoms via continued abuse of opioids.

The Scientific Story

The striking sensory details of Benjamin's narrative demonstrate the embodied and personal expression of the detrimental neuroadaptations that are key to the development and maintenance of opioid addiction (Goldstein & Volkow 2002). In this next section, I will delineate the drug-induced modifications of neurocircuitry that correspond to Benjamin's lived experiences dealing with the withdrawal stage of addiction.

As previously mentioned in Chapter 2, the initial stage of addiction is defined by a marked increase in dopamine levels and ensuing alterations to the mesolimbic dopamine pathway of the brain (Volkow et al. 2016). The ultimate impact of these neurochemical changes is a strong reinforcing association between using the drug and the heightened sense of euphoria that compels the addict to want to use again, leading to the addicted state (Volkow et al. 2016). However, with chronic exposure to the drug, there is a decrease in function of the neurotransmitter systems in the neurocircuitry involved in the acute reinforcing effects of drug of abuse (Volkow et al. 2004). Specifically, the mesolimbic dopamine system becomes compromised, and results in a decrease in dopamine levels, marking the withdrawal stage of the addiction cycle (Volkow et al 2004). Consequently, the addicted person no longer experiences the same degree of euphoria or reward from using the drug as they did when they first began their drug use (Koob & Volkow 2010). Another impact of this drop off in dopamine is that the addicted individual often become less motivated by everyday stimuli (e.g., relationships and activities) than they had previously. It is important to note that these changes become deeply ingrained and cannot be immediately reversed through abstinence from drug use alone (Volkow & Li 2004).

The neurobiology underlying this shift to the withdrawal stage involves two types of neuroanatomical changes: within-system changes and between-systems changes (Koob & LeMoal 2001). The within-systems changes are related to the aforesaid decline in dopaminergic activity, which in turn creates the associated negative physical symptoms and lethargic behavioral condition as seen in Benjamin's case (Koob & LeMoal 2001). Additionally, the between-system changes involves recruitment of non-dopaminergic neurotransmitter systems, involved in stress regulation (Koob & LeMoal 2001). The "rewiring" of these neuroanatomical stress systems increases the addicted person's reactivity to stress and leads to the emergence of a negative affective state characteristic of the withdrawal stage (Koob & LeMoal 2001). This process of elevating the stress response is fueled by the neurotransmitters, corticotropin-releasing factor (CRF) and dynorphin, which ordinarily help to maintain homeostasis. However, in the addicted brain, the "rewired" systems becomes overactive, giving rise to the negative affect that ensues when the direct effects of the drug wear off or when the drug is withdrawn (Koob & LeMoal 2009). As a result of these combined changes, the addicted person transitions from taking the opioid drug simply to feel pleasure, or to "get high," to taking them for the purpose of reducing the physical, behavioral, and emotional symptoms of withdrawal (Koob 2008). The outward manifestation of these changes in neurocircuitry and functionality of various neurotransmitter (see Figure 1) are evident in Benjamin's narrative, as he struggled to manage "severe headaches and muscle cramping" as well as the heightened depressive symptoms that crippled his normal desires.

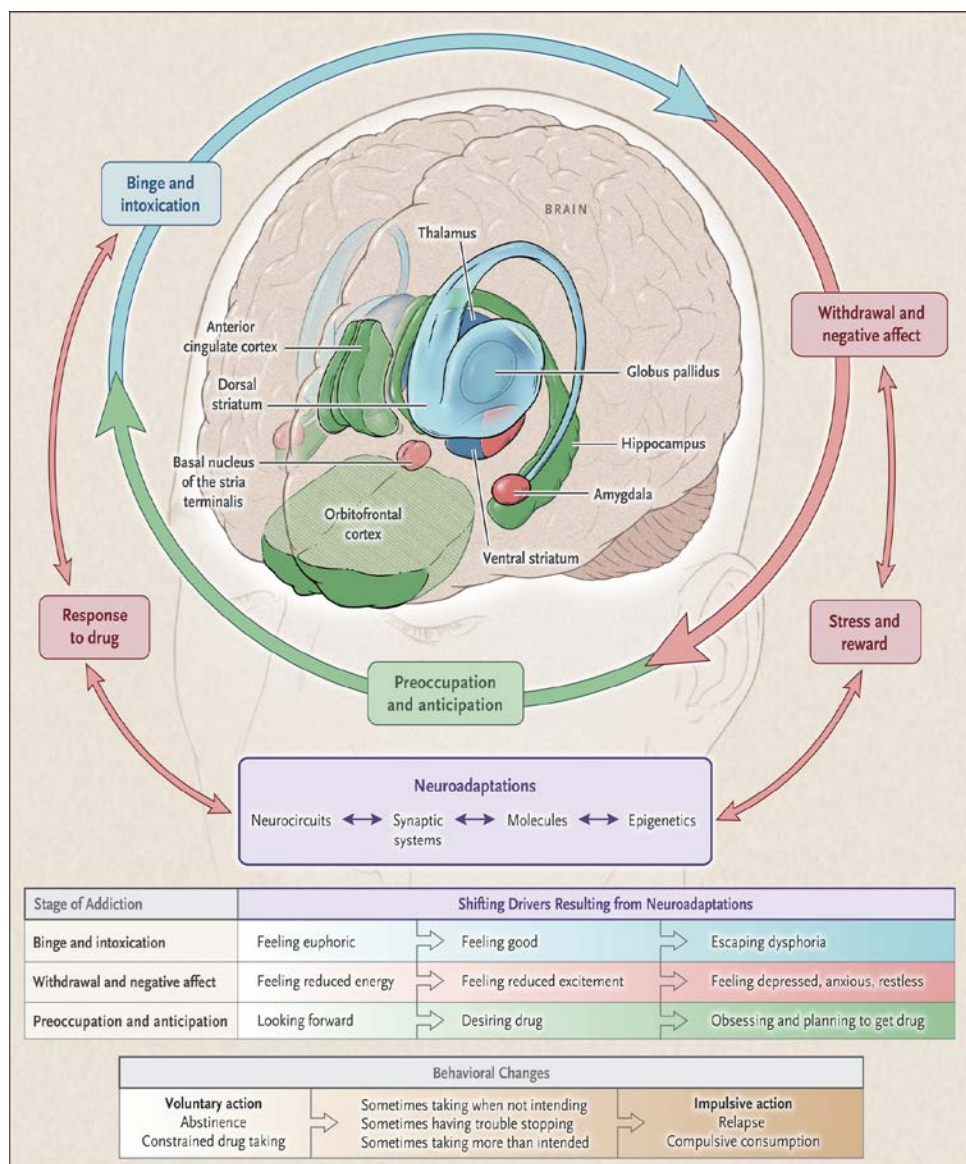


Figure 1. Taken from (Volkow et al., 2016). During withdrawal, the activation of brain regions involved in emotions (in pink) results in negative affect and enhanced reactivity to stressors. The compromised neurocircuitry reflects the disruption of the dopamine and the stress-regulatory pathways of the brain, which are affected by CRF and dynorphin.

Chasing Normal

In the previous section, Benjamin's brief, yet vivid personal narrative of experiencing the detrimental effects of withdrawal, exposed the embodied suffering that arise from alterations to

crucial reward and stress neural pathways (Volkow et al. 2016). However, Benjamin's engaging story does not end with this commentary on withdrawal, but extends beyond this minor exchange that he and I shared. In fact, the later portion of Benjamin's life history, specifically his tremendous struggle to enter into and remain in recovery, was a moving and deeply theorized story.

During his life history interview, Benjamin focused a great deal on explaining "how addiction works, and why it is so Goddamn hard to shake." In describing his time as an addict, he spoke about the primary allure of using opioids:

After the first time you use heroin or pain pills or whatever you're into, you are on top of the world. It is like you are floating on a cloud that you never want to come down from. Your problems don't exist anymore, your stress is gone. Poof. Why would you ever want that to stop? Fuck, you basically feel invisible when you first use. That's why I kept going back to it. Like, when people talk about being high, that's exactly it. But that doesn't last. In my experience you really only get high once. After that one time, you are always chasing that first high.

Benjamin, like the other study participants, noted that the first time using opioid drugs was a moment of pure bliss. "But once you keep using, that feeling, that high starts to slip away," he explained. Thinking back to the neuroscience research, one can see how his explanation reflects the transition from the initial spike in dopamine levels and heightened experience of reward to a drop off in the level of dopamine and largely negative effects over the course of chronic drug use (Volkow et al. 2016). Benjamin dolefully remarked that, "once you run out of dope or stop using after you've been on it for so long, then your body will remind you that you need to get some. It is like some fucked up biological alarm clock that it's time to go get a hit." Referring again to the onset of withdrawal, he expounded on this transition to the "dark side" of addiction:

This is how it works, when an addict starts getting sick. You know, like withdrawal and shit. Then the fun is over, because addicts like me aren't getting high anymore. Everyone thinks we are always trying to get high, to get fuck up. But that's where people just don't know. Because once those nice feelings go away and you are stuck fighting off the sickness and the pain. Seriously, I may have used for pleasure or whatever for like a few months, but after that it was all about not feeling sick. All I wanted during those times was for the pain and awful thoughts to away. And dope is the only thing that has ever made me feel good, so I just kept using. Some people say that heroin takes away the pain that it causes, and they are right. That's why it's a vicious cycle.

Once he began experiencing this negatively reinforcing component of his addiction, Benjamin's life "became a living hell". "All I ever thought about was dope. When am I going to get it? Where am I going to get it? How am I going to get?" He found himself going "crazy": "I would do anything to get my hands on a bag of heroin or find a pill. I even traded my shoes for a syringe full, one time. It was that bad. I would rather have walked around barefoot than go through withdrawal." This pattern of compulsive thinking and drug-seeking behavior continued for over a year. "It wasn't until I was homeless, laying in a pool of my own piss and begging every person that passed by for a fix, that I finally realized I needed help," he explained.

Even after moving to Coal Brook and attempting to start his recovery at the Addiction Help Center, Benjamin's mind was still plagued by the urge to use. He elaborated on the persistent cravings and impulses:

I'd been at my aunts for like two months, hadn't touch any dope, hadn't seen any dope. But I can tell you that I still wanted to find some so fucking bad. That shit was on my mind constantly. Even after I started working with Tom, I still thought about how great it would feel to shoot up again. And it's not like I was stupid, I knew using dope had ruined my life. But that didn't stop the thoughts from popping into my head every day.

He voiced that, "even to this day, I still think about shooting up every so often and I have been sober for like 4 months. It never really goes away, you just get better at managing it and keeping it from taking you back to that kind of life." In sum, Benjamin's explication of the

lasting effects of opioid addiction parallels the process of hedonic homeostatic dysregulation, which is widely recognized among neuroscientists and physicians alike (Koob & LeMoal 1997). In the following section, I will define the different components of hedonic homeostatic dysregulation in an effort to further demonstrate the association between neuroscientific research on addiction and the first-hand experiences of those suffering from opioid addiction.

Hedonic Homeostatic Dysregulation

In examining the stories of addiction, told by Benjamin and the other participants in this study, one can appreciate that opioid addiction involves a procedural shift from positive reinforcement (e.g., the increased levels of dopamine) driving the drug-seeking and drug-taking behavior to negative reinforcement (e.g., the symptoms of withdrawal/negative affect) driving such behavior (Koob 2008). This behavioral shift, which is linked to a transition from a high to low level of dopamine in the brain over the course of chronic opioid drug use, is the main component underlying the notion of hedonic homeostatic dysregulation (Koob & LeMoal 1997; Koob & LeMoal 2005; Koob & LeMoal 2008; Koob 2008).

Positive reinforcement can be conceived of the process by which the addition of a pleasing or rewarding stimulus (e.g., the euphoria or “high”) increases the probability of a response (e.g., chronic administration of the drug) (Volkow et al. 2002). Contrastingly, negative reinforcement can be defined as the process by which removal of a negative or aversive stimulus (e.g., dysphoria resulting from drug withdrawal) increases the probability of a response (e.g., continued drug intake) (Koob 2008). Both of these conditioning processes relate to the addicted individual’s motivation to seek and take the drug (Koob & LeMoal 1997). In regards to opioid

addiction, motivation is a state that can be defined as a “tendency of the whole animal to produce organized activity” (Hebb & Donderi 2013), and such motivational states are not constant but rather vary over time (Koob 2008). This conceptualization of motivation was first employed by Solomon and Corbit (1974), in the formulation of opponent process theory, which associated motivation with hedonic states in addiction. Subsequently, Solomon and Corbit (1974) postulated that once these hedonic states were initiated, they would be automatically regulated by the central nervous system (CNS) with mechanisms that would reduce the intense experience of the hedonic state (Koob 2008). Said differently, a sense of pleasure or euphoria (a primary hedonic state) is the result of an *a-process* (creates a hedonic state) that in turn generates a *b-process* (an after-reaction), in which the *b-process* cancels out the *a-process* and produces a tolerance to the stimulus that generates the pleasant experience (Koob & LeMoal 1997).

The hedonic changes associated with chronic opioid drug use and addiction are a dramatic example of opponent process theory (Solomon & Corbit 1974; Koob & LeMoal 1997; Koob 2008). With opioid addiction, drug use produces the *a-process* or positive hedonic responses. In contrast, the *b-process* in addiction appears after the *a-process* is terminated, and is characterized by a slow onset, gradual decay, and becomes increasingly larger with repeated administration of the drug. Therefore, Koob (2000) in specifying the process of hedonic homeostatic dysregulation (see Figure 2), stated that opponent hedonic processes begin early during long-term drug use, reflect changes in the mesolimbic dopamine and stress neural pathways of the brain, acquire allostatic-like¹ physiological properties, and form one of the major motivations for recurrent drug seeking and taking (Koob & LeMoal 2005).

Opioid addiction, as defined by a plethora of scientific evidence, is a cycle of increasing dysregulation of reward and stress mechanisms within the brain that results in a negative

¹ Allostasis is the process of achieving stability through change (Koob 2008).

affective state contributing to the compulsive and chronic use of the drug (Volkow et al. 2016). As stated previously, within-system neuroadaptations and between-system neuroadaptations result in failure of the homeostatic mechanisms, or normal regulation of the mesolimbic dopamine pathway. The overall argument here is that opioid addiction represents a break with certain homeostatic brain regulatory mechanisms (Koob & LeMoal 1997). However, the view that opioid addiction represents a simple break with homeostasis is not sufficient to explain a number of key elements of this addiction. Addiction to opioids, like other chronic diseases such as diabetes, worsens over time, is subject to significant environmental influences, and leaves a residual neuroadaptive trace that allows for addiction to reoccur even months and years following detoxification and abstinence (Volkow et al. 2004). Therefore, opioid addiction involves more than simply dysregulation of hedonic function and executive function, but is a break with homeostasis of these systems that represents a change to an allostatic state² (Koob 2008). Hence, with repeated exposure to the drug, the brain attempts via molecular, cellular, and neurocircuitry changes to maintain stability. However, these efforts are met with a significant cost³ (Koob 2008).

Overall this neuroscientifically-derived understanding of opioid addiction indicates that neurochemical dysregulation in the neurocircuitry of the reward and stress-regulatory systems in the brain provide a motivational background for craving and relapse (Koob & Volkow 2010). Such dysregulation persists into early recovery, but declines greatly once the formerly addicted individual is in long-term stable recovery (Koob & Volkow 2010). The neuroanatomical and neurochemical alterations that make up the process of hedonic homeostatic dysregulation

² An allostatic state is a state of chronic deviation of the regulatory system from its normal (homeostatic) operating level (Koob 2008).

³ An allostatic load is the cost to the brain and body of the deviation, accumulating over time, and reflecting in many cases pathological states and accumulation of damage (Koob 2008).

provide a biomolecular backdrop for and empirically substantiate the lived experiences of Benjamin and many others that have suffered from addiction.

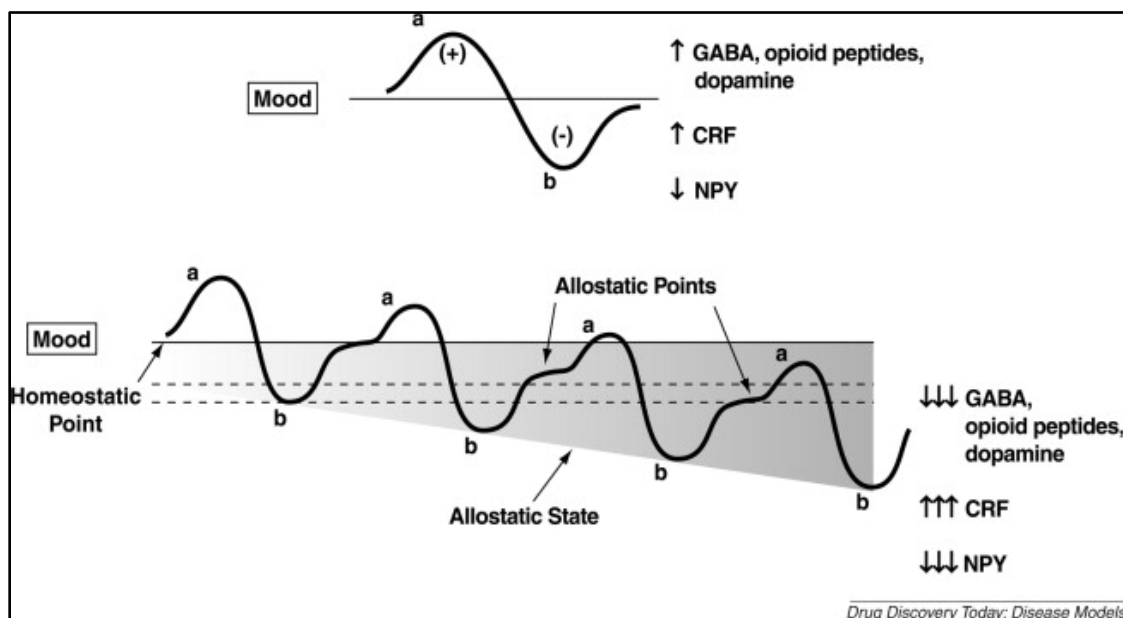


Figure 2. Taken from (Koob 2008).

Diagram illustrating the process of hedonic homeostatic dysregulation as described above.

Addicts Need Medicine

Neurobiological research, as discussed earlier, has produced knowledge of the specific neuroanatomical structures, neurochemical pathways, and adaptive changes that occur with opioid addiction (Volkow & Li 2004; Koob & Volkow 2010; Volkow et al. 2016).

Correspondingly, such research has opened the door for developing medical treatments that target these addiction processes in the brain, in order to reduce the associated behavioral responses (Koob & LeMoal 2008). Currently, there are only three medications approved, specifically for treating opioid addiction: methadone, buprenorphine, and extended-release naltrexone (Bart 2012). Further, neuroscience and clinical research has shown that sustained medical treatment over years or even a lifetime is often necessary to achieve and maintain long-

term recovery from opioid addiction (White 2014). Specifically, these medications are shown to be effective for reducing illicit opioid use, relapse risk, and improving social function (Volkow 2018). For the purposes of this chapter, I will discuss the pharmacological mechanisms involved in methadone, buprenorphine, and extended-release naltrexone; as well as discuss the effectiveness of each drug. As in other parts of the chapter, this section draws on Benjamin's story of recovery. Appropriately, this chapter concludes with a discussion about the ways in which Suboxone treatment became vital for Benjamin's initiation of and continued success in recovery.

Medical Treatments for Opioid Addiction

Medication-assisted therapy (MAT) is a blanket term used to encompass the three above-mentioned pharmacotherapies used in the treatment of those suffering from opioid addiction. On the whole, these drugs are utilized to mitigate or prevent the effects induced by opioids, depending on their pharmacological properties (Bell 2014). All three pharmacotherapies work by binding to opioid receptors, to which the opioids themselves typically attach (Bell 2014; Volkow et al. 2014; Volkow 2018). As will be shown in the following section, the differences in how these substances bind to the opioid receptors are what confer MAT drugs their effectiveness in treating the eclectic symptoms of opioid addiction (Bell 2014; Volkow et al. 2014; Volkow 2017).

Methadone, a long-acting opioid agonist⁴, has been used for longest of the three pharmacotherapies, and is often recognized as “the maintenance drug” (Volkow 2018). In contrast to commonly abused opioids that are only active for up to several hours, methadone

⁴ A substance that binds to specific receptors (e.g. opioid receptors) and initiates the associated physiological response (Bell 2014).

lingers in the body for multiple days (Volkow 2018). Accordingly, methadone has great potential for being highly effective in lowering relapse rates for addicted persons, since it can remain on the opioid receptors over longer durations of time (Bell 2014). Such increased duration of binding to the opioid receptor also decreases the likelihood that drug cravings and compulsions to use will occur (Volkow 2018).

Buprenorphine, unlike methadone, is not a full opioid agonist (Bart 2012). Rather, buprenorphine is considered to be a partial agonist⁵(Bell 2014). Interestingly, this pharmacotherapy has a unique function in that if presented at low concentrations, the drug acts like methadone, but when presented at high concentrations it can act like an antagonist⁶ (Volkow et al. 2014). Buprenorphine is characterized by low activity, because of high specificity and binding affinity for opioid receptors (Bart 2012). Furthermore, this low activity allows for a normalizing, as opposed to an intoxicating, effect on individuals suffering from opioid addiction, who are administered the drug during the stage of withdrawal (Volkow et al. 2014). This medication does have some side effects including: nausea, constipation and sedation (Bell 2014). However, when considered against the other therapies, buprenorphine was found to be safer as it does not induce respiratory depression, even at high doses (Bart 2012). Besides the use of buprenorphine along, the drug can be effectively co-administered with another substance called naloxone (Chiang & Hawks 2003). Naloxone, an opioid receptor antagonist, prevents the binding of opioids to opioid receptors. When the two drugs are combined (four parts buprenorphine to one part naloxone), they form a pill that is referred to as Suboxone (Chiang & Hawks 2003).

Whereas both methadone and buprenorphine are used as “maintenance” pharmacotherapies, naltrexone is usually administered at the conclusion of the detoxification

⁵ A substance that binds to and activates given receptors, but only has partial efficacy at the receptor relative to a full agonist (Bell 2014).

⁶ A substance that interferes with or blocks the receptor and resulting physiological action (Bell 2014).

therapy. Similar to the other two medications, naltrexone binds to opioid receptors, however, it does not propagate the signals for reward upon linkage. Instead, naltrexone acts as an antagonist for the opioid receptors. In other words, this medication blocks the receptor binding site and prevents the firing of the mesolimbic dopaminergic system that occurs when opioids bind to the given receptors (Bart 2012). Thus, naltrexone is a powerful drug that thwarts relapse because it is capable of clinging onto opioid receptors with an estimated affinity of one hundred times greater than most addictive opioids (Bart 2012). This MAT drug is generally thought to be poorly tolerated, which mostly reflects the poor compliance reported among people with opioid addiction disorder treated using the oral naltrexone (Bart 2012). In order to improve compliance, an extended-release naltrexone formulation (Vivitrol), which only requires a monthly injection, was developed and approved by the FDA for opioid use disorder in 2010 (Volkow 2018). These medications, alone, cannot instigate recovery for a person addicted to opioids. However, an abundance of research has shown that MAT pharmacotherapies do reduce withdrawal symptoms, improve mood, and help restore physiological balance, thus allowing the person's "rewired" brain to heal while they work towards recovery (Koob 2008; Volkow 2018).

If You're Sick, You Need Medicine

Earlier, in the introducing Benjamin, I noted that he highlighted the importance of using a medication-assisted treatment (MAT) drugs as a beginning step in recovering from opioid addiction. That piece of Benjamin's life history was composed after his interview and numerous follow-up discussions that we had about the subject of pharmacotherapies. In what follows, an aggregate of his personal experiences using MAT are sketched out.

For Benjamin, as for many addicted individuals, even starting to think about the possibility of recovery seems insurmountable while dealing with drug cravings drowning out all of other thoughts. Considering this troublesome aspect of opioid addiction in the context of his own story, Benjamin revealed:

I went to see Tom every single day for 2 months. I talked to him about what I needed to do to get better, to stay of drugs, to get my life back. I even saw some sort of psychologist like once a week to go over my issues with being in recovery. Truth is, I fucking hated it. But that isn't the point. What I'm trying to say is, I did all that and I still couldn't get my mind off of using. I would sit up at night for weeks thinking about trying to score some dope. Sometimes I even had these awful pains, like you get when you're in withdrawal. I barely slept, and I was about to go crazy because there was this little voice inside my head was telling me to use again. It was a never ending nightmare.

Nearly a month later, after telling Tom about his misery, Benjamin went to a local private care physician and obtained a prescription for Suboxone. He spoke at length about this turning point in his battle against opioid addiction:

The doc told me all about it [Suboxone], and how it was supposed to help me out with all those crazy thoughts about dope. I didn't really understand a whole lot of what he said, bunch of science talk. But all I know is that a week into taking the Suboxone, I already felt way better than I had in months. I was able to calm down and sleep. I could talk to Tom about things other than shooting up and old gang stories. I won't say it cured me, but it definitely pushed me into a new place. A place where I could finally accept my decision and be serious about my recovery. Don't get me wrong, it still took a lot of hard work to be where I'm at with 4 months of sobriety, but I think taking meds like that gives you an extra edge. It takes away an obstacle [thoughts about taking drugs] and lets you start focusing on yourself, on the people around you.

Having psychological and physiological relieve from the burden of drug cravings allowed Benjamin to more fully appreciate and commit to his recovery. Following those first few weeks of taking Suboxone, in addition to working with Tom, he was able to start doing landscaping and other household maintenance work at his aunt's house, and he joined an addiction support group. These new physical and social activities further contributed to advancing his recovery. Today,

Benjamin continues to take Suboxone, and has been working with his physician as well as Tom to continually decrease the dose as he progresses through his recovery.

Conclusion

This chapter has demonstrated that neuroscience and clinical research based on the CRBD (Leshner 1997; Volkow et al. 2016) model of addiction serves as a neurobiological window into the real-life experiences of pain and suffering endured by those suffering from opioid addiction. Examining Benjamin's narrative of addiction and recovery, one can see that current pharmacotherapies can restore balance in brain circuitry that has been affected by opioid drugs. The restoration of these dysregulated neural pathways not only helps to mitigate an addicted person's overactive response to stress and negative feelings, but allows the addicted individual to improve their executive function and self-regulation (Koob 2008; Koob & LeMoal 2008; Volkow et al. 2014). Furthermore, reduction in withdrawal symptoms and cravings for the drug, creates the opportunity for those in recovery to enhance the salience of natural, healthy rewards such as social contact or physical labor, which could enable those rewards to compete with the direct and acquired motivating properties of opioid drugs. Despite the efficaciousness of these neurobiologically-informed medical treatment, the subsequent chapter contends that MAT, alone, is not sufficient for generating successful recovery. Chapter 5 also includes a critical discussion regarding the prominent, acute care approach, which lies in contrast to Tom's "small town" approach that he employs in his continued care program at the Addiction Help Center.

Chapter 6: The Clinic

The previous chapter demonstrated that the conceptualization of addiction as a chronic relapsing brain disorder has profound implications for how the participants understood and experienced their addiction, and for the design and delivery of addiction treatment. In addition, the closing section of Chapter 5 cautioned that this despite the advantages of the current MAT drugs, “these are only make up one piece of the recovery puzzle.” In this chapter, drawing on a grounded theory analysis of field notes and life history data, I address the shortcomings of the acute care approach and contrast it with the “small town”⁷ approach (see Appendix 2) employed by Tom at the Addiction Help Center. While the acute care approach is centered mainly on cessation of drug use, the “small town” approach aims to create pre-recovery engagement, recovery initiation, long-term recovery maintenance, and improve the quality of family, social, and personal health in long-term recovery (White 2008). A framework will be formulated for understanding how the front-line service practices provided at the Addiction Help Center stimulate sustained recovery from opioid addiction. Throughout the chapter, the voices of those in recovery as well as Tom and others will clarify the specific ways in which the “small town” approach works to remedy the mismatch between the chronic nature of addiction and the dominant approaches designed to treat it. In concluding the chapter, I will explain why recovery, as a life-long, dynamic process, requires continued supported and management (White & Kelly 2010).

⁷ This term was mentioned repeatedly throughout my participant observation, interview, and many talks with Tom, the director of the Addiction Help Center.

The Clinic

A Man on a Mission

The Addiction Help Center, as previously described, is owned and directed by Tom. Tom, a 71-year-old man, grew up and has lived in Coal Brook for most of his life. Although he has never used drugs or suffered from addiction, he started the Addiction Help Center because both his daughter and son were previously addicted to heroin. As a parent of two addicted children, Tom had to learn about what addiction was, and more importantly “how can an addict get better.” He explained, “When I found out about my daughter’s addiction I had no idea what to do. I didn’t know where to start. I mean, I never used any drugs or nothing so how was I supposed to know what to do.” While trying to assist his daughter and cope with the entire ordeal, he began calling rehabilitation clinics as well as physicians that were friends of his, searching for answers about opioid addiction. “The first thing everyone tells you is get them to rehab and get them detoxed. But they never tell you what to do next,” he remarked in an irritated tone. A short time after discovering his daughter’s addiction, he sent her to a 28-day rehabilitation at a center, less than hour from his home. He vividly recalled the day he dropped her off:

I was so hopeful that this would work. She needed help and I couldn’t do anything for her. This was the only thing I knew to do based on what everyone was telling me to do. I didn’t actually know if these places were effective or not, but I was desperate to get her into some kind of treatment. Addiction is scary, I served in Vietnam, and that wasn’t nearly as nerve racking as watching your own daughter walk through the doors of that rehab clinic.

Despite his hopeful outlook, his daughter returned to using heroin almost immediately after being discharged from rehab. “At first I was furious, I couldn’t understand why it didn’t work,” Tom exclaimed during his interview. He expounded on the topic of rehabilitation:

Something you need to understand about detox and rehab places, they are just the first step in a long, exhausting recovery. But the thing is many people don't know that. Addicts going in for their first time don't know this, and parents, like myself, certainly don't know. Thinking back, sure I can say that 28 days or 30 days seemed too short, too good to be true. But in the moment, I just wanted her to get better and no one was telling me otherwise. I learned the hard way. Yes, you need detox, you need rehab. But you also need treatment and medication that keeps them from thinking about drugs constantly. Most rehabs don't let you use Suboxone or anything like that. The other thing that rehab doesn't give the addict is the kind of intense care and support that they are going to need for the long term. Addiction is a disease, it doesn't just go away in month.

This difficult, yet astute realization inspired Tom to open the Addiction Help Center nearly 20 years ago. Tom explained that, "this clinic was originally a place for addicts and their parents and even members of the wider community to get information about the nature of addiction, how to support someone with addiction, and how recovery works." However, Tom noticed that the addicted individuals visiting his clinic were not initiating their recovery, or even close to beginning the process. He recalled: "Each week I would see these addicts or their families coming in to see me, but I never heard about or saw any improvement in their condition. They would still have fresh track marks from shooting up or they would look all strung out from going through withdrawal. I knew I had to do something, I couldn't just sit here and lecture anymore." Correspondingly, he attended a training program and became certified as an addiction counselor. His mission was "to have a small town approach, to setup a program where these addicts out come get help with going to rehab, and then beginning their recovery in a good environment once they got clean."

Tom began reaching out to local physicians and community leaders for advice, funding, and any help he could get for advancing his mission. Eventually, he was able to establish a 2-year continuing program, which will be described in the following section. This program, despite at times lacking systematization and funding, benefited many of the participants in this study and

many others beyond the scope of my research sample. Tom recognizes that his program and modus operandi are not flawless in nature. Nevertheless, he holds the conviction that “My goal is to keep those addicts alive, and I will do everything to get them off drugs and into a better life. I may not be a scientist or a doctor or nothing like that, but I know something about addiction and I know how to get people to recovery.”

The Program

During an interview with Tom, he delineated in detail the various components involved in his continued care program that is housed in Addiction Help Center. He began by pointing out, “every addict is different, just like there is no one way into addiction, there isn’t one type of addict. So you have to consider their whole situation. Have they been to rehab already? Are they just leaving rehab? How bad is their addiction?” These are all questions that Tom asks in his initial assessment when he first meets with an individual suffering from addiction. “I want to know about what kinds of things led up to their addiction and also how serious they are about making this huge step to stop using, to recover,” Tom added.

Once he has collected a comprehensive history from the addicted person, he then negotiates a “plan of action with the addict” for moving forward with their recovery. He explained this process:

A lot of times you have an addict, after hearing about what the program is, that wants to get clean on their own. They don’t want to do it my way. That is Plan A, their way. So I get them all set up with a room here at the clinic or they are living nearby, and let them try it their way. In my experience, their way has never worked. And when Plan A fails, then we go to Plan B. Plan B is my way, which is usually sending them off to a 28-day or 30-day inpatient program so they can go through detox before coming back here.

Tom is often faced with addicted persons that have either never been to rehab or have attended a 28-day program in the past, but have recently relapsed. “Going to detox and rehab is

that next big step after we have talked through your history with drugs and what your goals are for recovery,” he noted. O’Brien and McKay (2007) assert that the detoxification⁸ process is an important and often necessary prerequisite to effective acute addiction treatment. Furthermore, detoxification can act as a catalyst for entry into long-term treatment but does not itself constitute treatment (White 2014).

Once detoxification is completed, the remainder of the 28-day or 30-day program is focused on rehabilitation. Tom informed me that, “the rehab portion of those program is usually based on the 12 step model.” The twelve step model is widely recognized as the cornerstone of addiction self-help groups, like Alcoholics Anonymous and Narcotics Anonymous (White & Kurtz 2006). In this model, those seeking treatment are expected to completely cease all, illegal and legal, use of psychoactive drugs (White & Kurtz 2006). Furthermore, the twelve step model calls on the addicted individual to accept responsibility for their addiction and strive to overcome their problem drug use (White 2014). “Addicts going through a twelve step rehab program usually have a therapist to counsel with, and they go to group meeting every day to discuss how they’re doing,” Tom commented. He continued his explanation of rehabilitation:

During rehab they [the addicts] only get evaluated a few to make sure they are improving. Those evaluations are focused on how the addict is feeling about being in rehab. They ask them a bunch of questions. How do you feel about being here? Are you any feeling better? Are you serious about your recovery? The addicts are heavily supervised and get treated pretty rough sometimes. Rehab is really about getting them to quit using and quit wanting to use.

⁸ Detoxification occurs when toxic substances that come from the ingestion of alcohol or other drugs are removed from the body via metabolism through the liver and excretion through the kidneys (O’Brien & McKay 2007).

Although rehabilitation programs are centered on ensuring complete cessation of and abstinence from drug use, this acute care-like approach by itself is largely ineffective in helping the addicted person maintain long-term recovery (White & Kelly 2010). The specific factors underlying the long-term inadequacy of detoxification and rehabilitation programs will be discussed, in terms of the acute approach, later in the chapter.

“After an addict finishes up with rehab, they come back here to the clinic. This is when my program really starts,” Tom affirmed. Unlike the rehabilitation programs, Tom’s program does not follow the 12-step model. His program is centered on “setting up a type of aftercare,” or continued care (White & Kelly 2010), which involves a comprehensive approach to preserving and advancing the addicted person’s efforts to recover. Although this extensive continued care program is tailored each individual, there are some general components:

When they come back from rehab, I set up appointments for them to see a private doctor that I know, so they can get Suboxone or the Vivitrol shot. I do this because coming out of rehab, is when they are most susceptible to relapsing, and the meds help keep their mind off of the drugs. There are a few other things I do for each addict. Each day, in the morning, the addicts come to the main office for a check in, which involves talking to me about how they’re feeling and if they’re having any urges to use again. Then they take a urine test as a way to establish some accountability for them. It may seem like I don’t trust them, but it is there more for the addicts to remember how far they’ve come. Each clean test adds another day to their sobriety, another victory. Other than the daily check ins, they go to two group-support meetings a week and a weekly therapy session with a psychologist that I bring in to the clinic. I also have family support meetings each Monday where they can talk with their parents or other relatives that come to see them. I try to provide them with an environment where they can work hard on their recovery, but also have the support they need for when times get tough.

These basic features of Tom’s program brings together MAT treatment, psychosocial therapy, social support, family support, and the cultivation of self-management as well as self-efficacy; all of which contribute to significantly enhancing the prospect of long-term recovery (Moos 2003; McKay 2005; Laudet 2008; White & Kelly 2010; Volkow et al. 2014; Volkow

2017). The individuals that participate in this program do so for 2 years. Throughout this time, Tom endeavors to “build a personal relationship with each addict and work with them to try to figure out what they like to do or what they want to do with their lives, now that they aren’t overwhelmed by their addiction.” Specifically, he attempts to eliminate the negative reinforcing effects associated with returning drug use, while replacing such effects with positive reinforcement for maintaining their recovery (McKay 2005; McKay 2016). Tom expounded on this facet of his program:

If I have a guy who is addicted to heroin or whatever, I try to see what he liked to do before he started using or what he might like to do now that he isn’t using. For example, if you were one of my participants and you said that you like to cook. Well, I would set you up in a kitchen and get you the right supplies for cooking up a meal. Then I would keep playing off that, maybe I have you cook for some of the other addicts here and myself. And I would start talking to you about how the cooking or whatever activity, is making you feel better about yourself and your recovery. That way you can enjoy yourself and begin to see how rewarding it is to be making food instead of laying on a couch with a needle in your arm.

Supplying individuals in recovery with new and stimulating activities can greatly improve sustained long-term recovery by allowing for rewarding experiences outside of drug use (Laudet 2008; McKay 2016; Boeri et al. 2015). In addition to developing personalized opportunities for “each addict to enjoy their life away from drugs,” Tom also offers a number of recovery services through his program. He works with each program participant to help them: “gain life skills, like working on a car or balancing a checkbook. They have been addicts for a long time and many of them don’t know how to handle being an adult yet.” Furthermore, he assists them in arranging job interviews, actually gaining employment, finding an apartment or a housing programs, and locating much needed social services. The provision of collateral services (e.g., employment counseling) function to promote long-term recovery maintenance and quality of life enhancement for individuals recovering from opioid addiction (White 2008).

At the end of the 2-year period, many of the formerly addicted individuals have gained full-time or part-time employment, have secured a place to live, and are successfully maintaining their recovery. Tom remarked about the discharging participants from his continued care program: “Once they have established themselves and are stable in their recovery, then it is time to move on from this place.” Although the program participants are no longer actively involved at the Addiction Help Center, Tom continues to offer peer-support group meetings twice-a-week as well as weekly family support meetings. He also makes an effort to check in with as many former participants as possible, “to see how they are doing and just see where they are at in life.”

Overall, Tom’s program comprises many elements of the underutilized, yet effective “recovery management” (White & Kelly 2010) and “community reinforcement” (Miller & Meyer 2004) approaches. Moreover, the program described above seems to be ahead of the curve, seeing as many of recommendations for addiction treatment and recovery put forth by McKay (2016) are used in Tom’s program.

Why Detox Isn’t Enough

Detoxification and rehabilitation, as evidenced by Tom’s account, are important precursors to beginning recovery. However, these processes are not typically followed by continued care program. Rather, detox and rehabilitation are used as the sole plan of treatment in the dominant, but poorly constructed acute care approach (White & Kelly 2010). Despite the evidence demonstrating that addiction is a chronic disease that requires long-term management care in order to foster successful recovery (White & McLellan 2008; Volkow et al. 2016), the acute care approach treats addiction much like minor cut or scrap. Said differently, in the acute care approach, treatment for addiction occurs over a short course (e.g. 28 days) and involves uniform, rather than individualized treatment (White & Kelly 2010). Furthermore, this treatment

approach is focused two factors: 1) eliminating addiction symptoms (e.g., compulsion to seek and take drugs) and 2) the cessation of any further drug use (White & Kelly 2010). Unlike Tom's collaborative orientation, the treatment professionals, following the acute care model, direct and dominate the assessment, treatment planning, and service delivery (White & Kelly 2010). Once the brief period of acute treatment (e.g. detox and rehabilitation) has been completed, the addicted individual is discharged and set off with the faulty impression that they have been somehow "cured" of their addiction (White & Kelly 2010). What is more, the acute treatment approach views long-term recovery as personally self-sustainable, without the need for ongoing professional assistance or external social support (White & Kelly 2010). This perspective stands in opposition not only to the philosophy underlying Tom's program, but also to the wealth of research indicating the need for continued care (McLellan et al. 2000; White & Kelly 2010), medical treatment (Elias & Kleber 2017; Volkow 2017), the establishment of a supportive social environment (Granfield & Cloud 2001), and collateral services (White 2008; Laudet & Humphreys 2013).

Many of the study participants spoke about the flawed nature of this approach, which holds the expectation that complete sobriety should be achieved after only one, brief episode of treatment and consigns continuing continued care to an afterthought (Kelly & White 2010).

Nina, a 29-year-old woman and former participant in Tom's program, spoke at length about "the revolving door of rehab and relapsing" prior to finding the Addiction Help Center. Nina first enter a rehabilitation program at the age of 18, after abusing and becoming addicted to heroin for nearly 3 years. She recounted her first time going through detox:

I got to the rehab place and like as soon as you go through the front door, boom! You're some piece of shit addict that needs to dry up, or at least that's what one of the people working there told me. It was miserable. Besides going through withdrawal, you get treated like some sort of insane person that can't be trusted to do anything. I mean, I went

there for help, not to be a mental patient or a prisoner. They make every decision for you. At one point I thought they were going to tell me when I was and wasn't allowed to go to the bathroom. They also try to convince you that the therapy sessions and group time with the other addicts is going to somehow make your addiction disappear. Let me tell you, that's complete bullshit.

Nina was released after her 28-day stay at this facility and set home without a plan for follow up or continued care, "I was given no sort of guidance or advice about to do next," she recalled. She continued: "I was scared out of mind to be back out in the world, I was so scared I would use again. And I didn't have a clue about where I could go to get help or how I was supposed to keep up the kind of life I had in rehab." Unfortunately, Nina's fear became her reality and she relapsed only 2 weeks after being discharged from the rehabilitation clinic.

The following year, when she was 19-years-old, Nina re-entered rehabilitation at a different inpatient clinic with the hopes of "being serious about recovery and sticking with it this time." However, her second time going through a detox and rehabilitation program was no different than the first. In fact, she explained that this experience was even worse than before:

I was so hopeful when I got there, my mom got me a spot and I really wanted to get clean for her. But just like the first time I went to rehab, it was a complete disaster. The counselors at this place would scream at me and never listened to me. They thought every addicts was just a liar. I didn't understand I thought these people were supposed to help me. I was fucking sick, but I wasn't getting cared for, I was getting abused. You can't recover from being an addict if everyone around you is making you feel worse about yourself, because when you feel that shitty all you want to do is use again. Being in that place was supposed to help my addiction, but it only made me worse.

Nina, despite the poor treatment she received, completed the program and was released at the end of the month. Once again, she was "set loose without any instructions, or way to access additional support services." However, when she returned home, her mother explained to her that, "She [her mother] found a real recovery program at this place called the Addiction Help

Center.” Nina recalled feeling slightly apprehensive prior to entering the continued care program and meeting Tom.

Her apprehension quickly faded after being exposed to Tom’s cooperative approach and fully engaging in a program that incorporated her perspective, supplied her with proper medical care, and afforded her positive, social support that she had been yearning for during past treatment. Nina explained:

What happens at Tom’s clinic is not detox or a rehab program, it is better. He gave me the kind of all-around support I needed to kick my addiction. Tom doesn’t approach recovery the way people at rehab did. He makes sure you have all your medical stuff taken care of and makes sure you don’t fuck up, but he also listens to you. I had a personal connection with Tom that I never had with anyone in rehab. That really made a big difference for me. It motivated me.

Nina finished up her time at the Addiction Help Center within 2 years. She has been able to sustain her recovery, and has 8 years of sobriety. She credits Tom for, “giving me the motivation, backing, and skills that I needed to recover and be a better me.” When I met Nina, she was living in New Jersey and working as a paralegal for a law firm. She returns to Coal Brook periodically to visit Tom and thank him for his dedication to helping others suffering from addiction. Nina’s negative experiences with rehabilitation programs and the staff working at those clinics is certainly an extreme case, however, it is one that clearly demonstrates the problematic nature of an approach that views addicted persons as able to maintain permanent sobriety and long-term recovery without any assistance or continued care (Kelly & White 2010).

This narrative depicting the failure of detox and rehabilitation, alone, to create long-term recovery was not unique to Nina, but appeared in all of the participants’ life histories. This prevailing account was not only evident in the narratives of those suffering from addiction, but also arose during an interview with Stephen, a 53-year-old emergency room physician. Stephen

is a friend of Tom and has worked in a hospital near Coal Brook, for over 20 years. Throughout his time as a doctor, he has witnessed countless incidents of individuals, who have overdosed, walk out of the emergency room doors only to return without any improvement in their condition. He is familiar with and supportive of Tom's clinic and the "small town" approach. In this excerpt from his interview, Stephen discusses the effectiveness of Tom's program in contrast to standard rehabilitation programs:

Stephen: What makes Tom's program so good is the fact that he treats the addict, not the addiction.

Researcher: Could you explain that a little more?

Stephen: So what I am saying is most rehab centers or standard treatment facilities are attempting to get rid of the addiction, they just want to stop the person from using drugs and get sober. But Tom takes that a step further and focuses not only on the addiction, but on the addict. See Tom has figured out something that most people dealing with addicts haven't yet, addiction isn't some mystical thing. Addiction resides in the addicted person. Tom knows that he is dealing with a whole lot of different things when it comes to addiction, that's why his way works. Don't get me wrong, I'm not saying rehab isn't important, but it isn't the end of the road. If someone wants to recover, it is a lifelong process just like someone that has diabetes. They need to continuously care and support.

Stephen's exceptional insight offers further credence not only to the success of Tom's work, but also to the notion that acute care, by itself, is not sufficient for generating sustained recovery. As we can see from the striking narratives of the study participants and the cogent empirical literature (White 2014), individuals discharged from rehabilitation are precariously bordering on the edge of recovery and re-addiction during the weeks, months and years following treatment (McLellan et al. 2000). Hence, continued care and additional recovery support services can significantly enhance long-term recovery outcomes (Denis & Scott 2007).

Continued care as a way into recovery

Although Addiction Help Center does not include access to detoxification and rehabilitation services on site, the multifaceted continued care program was cited by Alex as being, “the key to truly starting my recovery and the reason I am still clean today.” Alex’s statement was echoed by all study participants that were involved in Tom’s program. One participant in particular, Emma, told a powerful and informative story about the ways in which being in the continued care program fostered her recovery, after the acute care approach had failed her.

Emma is a 47-year-old woman that suffered from severe addiction to heroin for over 18 years. I was not able to conduct a full life history interview with her, nonetheless, she still offered to tell me about her battle with addiction, and eventual recovery. Emma recounted her numerous attempts to seek help for her addiction:

Rehab did nothing for me. I went to rehab 5 times. You are probably thinking, what the fuck is wrong with this lady? How did she mess up so many times? Well I can tell you why that kept happening. For me, rehab was like taking a vacation from dope. A really shitty, painful vacation. But like every vacation you have to come back to your reality. And my reality was using dope every day, multiple times each day. You see, rehab is so artificial. It gives you this space to get clean and talk about your feelings, but it’s not the real world. It cuts you off from the druggie friends, the bags of dope in your closet, the fact that you have nothing. And they expect you to take what happens in there and make it happen in a completely different world. It just isn’t possible.

Emma, similar to the other participants, was in desperate need of help that went beyond detox and temporary abstinence. Following her fourth round of rehabilitation she traveled to visit a friend that was living near Coal Brook at the time. During her visit, Emma’s friend took her “to meet Tom and check out the Addiction Help Center.” Emma was astounded: “I had never heard of addicts making progress like this and actually being successful in their recovery. Honestly, I

thought it was myth that anyone actually recovered from this shit. I didn't know a program like this existed. But as soon as I found out about it was from Tom, I wanted in."

As a result of this incidental visit, Emma joined Tom's program and was sent to detox for a fifth and final time. Emma returned to Addiction Help Center a month later. "The day I came back marked the beginning of my recovery," she proudly recounted. She vividly remembers enjoying her efforts to recover for the first time:

It was like a dream that I'd had for years. I was checking in with Tom everyday and showing him that I wasn't using anymore. We talked through any issue I was having, and I could tell him if I was struggling with wanting to use again. That wasn't something I could ever do in rehab. That was crazy to me. Even crazier was Tom setting it up so I could get the Vivitrol shot after I got out of rehab. I swear that basically kept me from having any urges to use. On top of all that he helped me find some jobs here and there, cleaning for people. I was finally doing it, I was finally in recovery.

As Laudet and White (2010) report, "individuals in recovery continue to experience many difficulties and to need support in many areas of functioning long after abstinence has been reached" (56). Thus in Emma's case, as in many others, the provision of medical, social, and community support eased the process of recovery initiation and recovery maintenance (White 2008).

Emma also explained that aside from the individualized care and array of recovery support services that Tom provided, the most important aspect for her "was how enjoyable he made recovery." Emma continued:

In my opinion, and maybe this is just me, you can have everything. Support groups, meds, family that supports you, maybe a job, and all that. But without really being motivated and loving your recovery, it won't last. Tom made all that hard work so much fun and rewarding for me, because he asked me about what I wanted out of this and what I would like to do with my life, what were my goals. Then he took everything I said and helped me make it happen. I wanted to stop using drugs, check. I wanted to reconnect with my mom, check. I wanted learn how to cook and take care of a house, check. I don't

know, there is something about someone asking me, not telling me what I want that was a game changer for me. I got to do all those things. Things I had spent years agonizing over because you can't do shit when you're a dopehead like I was. If you can do that with every addict, do it. Take it from me, it makes a world of difference.

Today, Emma has 10 years of sobriety and is currently living in Vermont with her husband. Her story brings a nuanced perspective to the discussion, as she denotes the value of, what she called, “addict-focused care.” Having personalized care motivated her to actively engage in and maintain her recovery. She also made the important point that, in addition to comprehensive continued care and the accessibility of recovery support services (Laudet & Humphreys 2013), the process of recovery must be a rewarding experience in order to promote long-term sustained recovery (McKay 2016).

Conclusion

This chapter has shown that addiction treatment following the model of acute care is largely ineffective, in stark contrast to the “small town” approach employed at the Addiction Help Center. Tom’s model and the associated comprehensive, continuing care program bring together an emphasis on patients’ choice with regard to treatment goals; a sustained partnership between the addicted person and treatment professional; the establishment of a recovery-oriented residential environment; the promotion of family and prorecovery peer social support; the linking of addicted individuals to medical care, employment opportunities, and housing services; and the provision of opportunities for meaningful and rewarding activities (White McLellan 2008; White & Kelly 2010). Taken together, these various elements allow those suffering from addiction to initiate their recovery efforts, improve their quality of life, and maintain long-term recovery (Laudet & White 2010). In the concluding chapter of the thesis, I reflect on Chapter 4, Chapter 5, and Chapter 6, and consider the contribution that this study has made to the broader addiction

and recovery literatures. In addition, the final chapter includes a discussion of recommendations for future research on the process of recovery.

Chapter 7: Conclusion

During one of my many, long conversations with Benjamin, he remarked: “Addiction is kind of like smashing a glass bottle against the ground, and all the individual shards of glass make up this one problem. And recovery is like trying to piece them all back together.” In this closing chapter I discuss the various ways in which this exploratory ethnographic study has helped in empirically picking out the “the individual shards” that make up both addiction and recovery, and has provided insights into how we can better piece together those in recovery from opioid addiction. The the contributions made by this thesis to a wide variety of research literature will be considered. The chapter will conclude with a discussion of recommendations for future research on the process of recovery.

Scholarly Contributions

This explorative research on the lived experiences of individuals that have suffered and are recovering from opioid addiction contributes to the extant literature in four ways. First and foremost, this study gave a voice to those who have endured the physiological and emotional torment of addiction. Second, it expands our knowledge about the complex set of community, family, social, and personal factors that influence the initiation and maintenance of recovery (Laudet 2007; White 2014). Third, the research explores the ways in which advanced neurobiological studies of addiction provide a pathophysiological window into the embodied experiences of individuals during their addiction and now in recovering. Additionally, the biomedicalized narratives of the study participants add further grounds for accepting the notion that drug addiction is a chronic relapsing brain disease (White McLellan 2008; Volkow et al. 2016), despite being viewed as suspect amongst some academic circles (Campbell 2010). This

research also adds to the growing literature on medically-assisted therapy (MAT), indicating the utility of pharmacotherapies in helping to facilitate and promote long-term stable recovery (Kelly & White 2010; Bart 2012; White 2014; Volkow 2018). Finally, this thesis presents additional evidence in regards to the effectiveness of establishing a long lasting recovery-oriented approach to caring for the many people attempting to overcome their addiction (Kelly & White 2010).

Future Directions

The Need for Consilience in Recovery Research

The life histories of the study participants wove together neurobiological, behavioral, historical, sociological, psychological, and emotional mechanisms into a composite image of recovery. These varied sources were not described as being mutually exclusive, but as interacting in dynamic ways to establish long-term sustained recovery from drug addiction. Such a holistic understanding of recovery portrayed by the participants of this study, has significant implications for continued research.

Progress in neurobiological research on the relationship between specific neurotransmitters and neural circuitry involved in addiction, in turn has led to the formulation of pharmacotherapies to counteract these alterations to the brain (Volkow et al. 2016; Volkow 2018). These medications have been found to reduce the physical and emotional symptoms of withdrawal, help restore of normal neurophysiological functioning, improve quality of life, and promote recovery efforts (White & McLellan 2008; White 2014; Bart 2012; Bell 2014; Volkow et al. 2016). In spite of this impressive progress in neurobiological studies and associated pharmacotherapies, there has been an increasingly narrow focus on medical treatment as the “gold standard for the treatment” of someone suffering from opioid addiction (Volkow 2018: 285). However, solely exploring the effectiveness of medicalized treatment neglects the

numerous other components (e.g., family social support, recovery support services, accountability, etc.) that are involved in the process of recovery. Similarly, sociological studies of recovery also involve methodological weaknesses (Kovac 2013). Most sociologists, studying the process of recovery, concentrate on delineating the way in which the social contextual and social processes influence the decision to initiate and maintain recovery (Mawson et al. 2015; Laudet & Hill 2015; Best et al. 2017). These studies produce important knowledge about the community, family, social and personal mechanism underlying recovery, but often neglect the specific impact of the neurochemical and neurophysiological on this process (Koob & Volkow 2010). Sociological perspectives on recovery are valuable, but only present part of the conceptual picture. In light of these countervailing forces in the field of recovery research, I posit that neurobiology and sociology as well as psychology must create a consilience, to use the words of E. O. Wilson (1999). In order to achieve a comprehensive understanding of recovery and develop appropriate recovery-oriented treatment programs; research findings and literature must share among these disciplines in an effort to create an integrative theoretical model of recovery (Laudet & Best 2015).

The Voices of Suffering

An additional implication for future research on recovery and recovery-oriented care, is the need for further research to take into account the stories and experiences of those in recovery from drug addiction. The perspectives and aspirations of those in recovery are often ignored in the context of treatment (McKay 2010). As this thesis study has shown, every case of recovery involved a unique combination of circumstances. These diverse narratives about the process of recovery offers a nuanced insight into the complexities of the recovery process. Such knowledge

has implication for research and policy as well as practice was seen in Tom's continued care program. Tom's recovery-oriented approach to continuing care identified, monitored, and supported of the life goals of his participants, in a way that stimulated long-term stable recovery. In light of the findings in this study, forthcoming research on recovery should implement and assess of the effectiveness of personalized treatments that pay attention to the specific processes and mechanisms supporting the development and perpetuation of a person's recovery. The importance of patients' choice has been stressed in other areas of medicine, especially with regard to the management of chronic diseases (Wagner et al 2001), has yet to become standard practice in the addiction treatment and recovery-oriented care (White 2014).

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Appendix 1: Qualitative Research

Entry to the Field

As one attempts to gain entry to a new community or to a different culture, one is bound to face various roadblocks. How one goes about circumventing these roadblocks is vital if the research is to be successful. The notion of the researcher as an "outsider" and how one deals with the dichotomy of "insider--outsider" issues is critical in this type of qualitative research (Merton 1972).

In addition to well-placed informants or introductions made by members of the group one wishes to study, an intermediary if you will, it is most helpful if the researcher possesses something in their own history, their own psyche that helps them gain access to, and be trusted by their study population. Such was the case for me in my research in Coal Brook. I studied the lives of individuals recovering from opioid addiction; I have known a number of individuals that also suffered from various drug addictions. A few of my relatives and even childhood friends have suffered from addiction to opioids. Although I do not spend the majority of personal time interacting with these family members and former friends, their struggles provided me with a frame of reference for interacting with people that once suffered from chronic and debilitating drug use. In addition to my more intimate experiences with those addicted to opioid drugs, my previous coursework in psychopharmacology and cognitive neuroscience provided me with the scientific knowledge about the effects of opioid addiction that I eventually witnessed first-hand during my field work.

Finally, my understanding of rural north central Pennsylvania small towns stems from living in the area for the last 22 years of my life. I grew up in a small farming town only 35 miles away from Coal Brook; I used this information about my geographic propinquity as a way

to mitigate any apprehensiveness that my participants may have felt upon meeting me for the first time. Therefore, I was not completely an “outsider” upon entering the research setting.

My Lived Experiences

Conducting this research was intellectually stimulating, challenging, and at times terrifying. Much of the writing in the main body of the thesis focuses on the empirically interesting aspects of this study, however, in this section I will discuss the arduous and emotionally draining side of my time spent conducting field work.

Qualitative research, especially ethnography, is a time consuming and mentally as well as emotionally demanding endeavor as many scholars can attest. Over and above the standard challenges, working with drug users creates another dimension of emotional difficulty. The stories that my participants recalled were replete with depressing details about their long-time struggles with addiction and the many associated problems that follow from chronic drug use. I found myself time and time again seeking help from psychologists at the Bucknell Counseling & Student Development Center. Although these psychological counseling sessions were purportedly confidential, I was unable to speak openly and freely due to ethical concerns I had as a young researcher. Despite my own emotional and psychological concerns, my main focus was on maintaining the confidentiality and protection of my participants as to not introduce any further suffering into their lives.

In spite of the seemingly negative side effects of my field work, the emotional and psychological discomfort I was experiencing allowed me to personally distance myself from the study participants. At times, ethnographers and qualitative researchers can establish “over rapport” or become too emotionally and socially close to their participants (Van Maanen 1988). In doing so, these researchers subject their data to a high degree of researcher bias. However, in

my case, I was able to maintain rapport with my participants, while not becoming too emotionally involved during my research as evidenced by my choice to use the objectivist form of the grounded theory approach (see Chapter 3). The psychological distress that I experienced while conducting participant observations and sitting through lengthy interviews with these former addicts taught me invaluable lessons about the role of the researcher when conducting a qualitative study. This knowledge that I gained experientially cannot be gleaned by paging through scholarly texts, but is learned by going into the field and engaging the study participants. I am grateful for the insights and research expertise gained as well as the depression that I endured during my time in the field, because I am certain that these experiences improved the quality of this thesis project.

Appendix 2: The “Small Town” Concept

Throughout Chapter 6 of the thesis, I constantly discussion Tom’s “small town” approach in juxtaposition to the acute care approach to treating opioid addiction. Therefore, that portion of the text examines the “small town” approach strictly as a unique model for addiction treatment, however, the “small town” approach cannot be simply reduced to a therapeutic model for treatment of and recovery from opioid addiction. As stated previously, Tom recurrently mentioned that, in reference to opioid addiction within Coal Brook, “it is a small town problem, and it must be dealt with in a small town way.” Said differently, Tom is referring to the mobilization of community resources, which is made possible by the dense social networks and shared class identity that exist in context of these rural small towns.

Coal Brook has a population of roughly 17,000 people, consisting of mostly white, working class men and women that reside in these rural small towns. These towns exhibits an unusual traditional working-class industrial society which has been marooned in a post-industrial world. The anthracite coal industry mostly closed down in the 1960’s, leading to a 50-year period continuing to the present in which these isolated towns, that drew their wealth and livelihood from the industry for nearly a century, lost their economic base (Milofsky & Green 2016). Subsequently, the population aged and many young people moved away. Nevertheless, the remaining citizens of Coal Brook embrace a curiously strong community collectivity amid a devastated social and economic landscape (Marsh 1987). This strong sense of place related to the coal mining industry has yielded a distinctive interconnected social structure that reflects a rich history of socioeconomic, occupational, and communal solidarity (MacGaffey 2013). The residents of Coal Brook are connected to close-knit social networks that includes extended family, neighbors, friends, and fellow church goers to

name a few. These networks have been formed through a shared anthracite coal mining heritage, working class values, and close geographic proximity.

In terms of the Addiction Help Center, Tom utilized members of his own social network to assist in the development and operation of his continued care program. Tom would often contact childhood friends, former neighbors, and community leader in order to set up employment and housing agreements for the individuals enrolled in his program. Additionally, Tom negotiated with local police officers and judges, that he was either friends with or knew by association, in order to arrange for addicted individuals to be placed in his program rather than face a prison sentence. In this way, Tom drew upon his numerous social network ties to organize a community-level effort to address the issue of opioid addiction.